

MEETING OF THE BOARD OF CITY COMMISSIONERS

JANUARY 10, 2017

The Board of City Commissioners met in regular session on January 10, 2017 at the hour of 5:15 p.m. in the Tom Baker Meeting Room, City/County Office Building, 221 North Fifth Street, Bismarck, North Dakota. There were present: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary.

1. The Board of City Commissioners considered approval of the minutes of the special meeting on December 29, 2016 (regular meeting rescheduled from December 27, 2016 due to the winter storm, limited travel and road conditions).

Commissioner Askvig made a motion to approve the minutes. Commissioner Oban seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

2. CONSENT AGENDA

A. The Board of City Commissioners considered and approved voucher numbers 1069767 to 1070061.

B. The Board of City Commissioners reviewed the personnel actions.

C. The Board of City Commissioners considered the request for approval from the Airport for the following items:

- Change Order 1 to the September 30, 2016 construction agreement with Skeels Electric for Security Checkpoint Reconfiguration Phase 1.
- Consider two agreements with the Federal Aviation Administration (FAA) associated with the Airport Traffic Control Tower (ATCT).
- Consider Change Order 6 to the September 21, 2015 agreement with JMAC Resources, Inc. for grading improvements for On-Site Wetland Mitigation (Phase 4).
- Consider Change Order 1 to the September 30, 2016 construction agreement with Capital City Construction for Security Checkpoint Reconfiguration Phase 1.

D. The Board of City Commissioners considered the request for approval from the Assessing Division of tax abatement applications for Disabled Veterans Credits at:

- 1517 N 13th Street for 2016: Martha Fiechtner qualified for the abatement.
- 921 N 1st Street for 2016: Scott Hauge qualified for the abatement.

E. The Board of City Commissioners considered the request for approval from the Community Development Department for the introduction of and call for the public hearing on the following items:

- Ordinance 6243, an ordinance text amendment relating to Title 4 (Building Regulations) - Section 4-02-02, initiated by the City of Bismarck. Staff recommends approval.

ORDINANCE NO. 6243

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 4-02-02 and 4-02-06 OF THE BISMARCK CODE OF ORDINANCES (REV.) RELATING TO ADOPTION OF THE CITY OF BISMARCK BUILDING CODE AND AMENDMENTS TO THE CODES.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 4-02-02 of the City of Bismarck Code of Ordinances (1986 Rev.) relating to Adoption of the City of Bismarck Building Code is hereby amended and re-enacted to read as follows:

4-02-02. Adoption of the City of Bismarck Building Code. There is hereby adopted by the City of Bismarck and incorporated by reference herein the City of Bismarck Building Code which shall consist of the following codes, except those portions hereinafter deleted, modified or amended; (appendix chapters are not adopted unless specified):

~~2012~~ 2015 International Building Code (IBC)

~~2012~~ 2015 International Residential Code (IRC) (including appendixes E & J)

~~2012~~ 2015 International Mechanical Code (IMC)

~~2012~~ 2015 International Fuel Gas Code (IFGC)

2015 International Energy Conservation Code (IECC)

Wiring Standards of North Dakota

North Dakota State Plumbing Code ~~(including appendix H)~~
(Ord. 4281, 8-23-89; Ord. 4452, 07-21-92; Ord. 4688, 05-23-95; Ord. 4911, 05-26-98; Ord. 5025, 01-11-00; Ord. 5316, 05-25-04; Ord. 5578, 02-26-08; Ord. 5802, 02-22-11; Ord. 6035, 04-08-14)

Section 2. Amendment. Section 4-02-06 relating to Amendments to the Codes is hereby amended and re-enacted as follows:

4-02-06. Amendments to the Codes. The codes adopted in Section 4-02-02 are hereby amended as follows:

1. General: Whenever reference is made to the National Electrical Code (NEC) it shall mean the Wiring Standards of North Dakota. Whenever reference is made to the International Plumbing Code (IPC) or the International Private Sewage Disposal Code (IPSDC) it shall mean the North Dakota State Plumbing Code. Whenever reference is made to flood hazard areas or flood-resistant construction requirements, the City of Bismarck Ordinance, Title 14, Chapter 14-04, Floodplain District regulations shall apply.

Whenever any work for which a permit is required has been commenced without first obtaining said permit the fee for said permit shall be double the normal fee.

2. ~~2012~~ 2015 International Building Code (IBC):

Section 101.4.7 Existing Buildings. Add: Exception: 1. Existing buildings may use Chapter 34 of the IBC 2012 as an alternative to using the IEBC 2015.

Section 104.8 Liability. Add: This code shall not be construed to relieve from or lessen the responsibility of any person owning, operating, or controlling any building or structure for any damages to persons or property caused by defects, nor shall the code enforcement agency or city be held as assuming any such liability by reason of the inspection authorized by this code or any permits or certificates issued under this code.

Section 105.2 Work exempt from permit. Building: Amend items 6 and 11 to read:

6. Sidewalks and driveways.

11. Swings and other playground equipment.

Section 105.2 Work exempt from permit. Building: Add item 14:

14. Reroofing.

Section 107.3.1 Approval of construction documents. Amend to read: When the Building Official issues a permit, the construction documents shall be approved. One set of construction drawings so reviewed shall be retained by the Building Official.

Section 109.2 Schedule of permit fees. Amend to read: Building permit valuation shall include total value of the work for which a

permit is being issued, such as electrical, gas, mechanical, plumbing equipment and other permanent systems, including materials and labor. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final building permit valuation shall be set by the building official.

Section 110.1-4: Add: Occupying or permitting occupancy of any building or structure prior to the issuance of a Certificate of Occupancy shall constitute an infraction under the provisions of the Code of Ordinances of the City of Bismarck.

Section 112 Board of Appeals: Delete.

Section 202 DEFINITIONS, COMMERCIAL MOTOR VEHICLE. Amend to read: A motor vehicle used to transport passengers or property, or motorized equipment where the motor vehicle or equipment: Has a gross vehicle weight rating of 10,000 pounds or more; or have combined weights greater than 26,000 lbs; or is designed to transport 16 or more passengers, including the driver.

Section 305.2 Group E, Day care facilities. Amend to read: Group E Day care facilities. This group includes buildings and structures or portions thereof occupied by more than twelve children older than 2½ years of age who receive educational supervision or personal care services for fewer than 24 hours per day.

Section 305.2.2 Twelve or fewer children. Amend to read: ~~Twelve~~ twelve or fewer children. A facility having twelve or fewer children receiving such day care shall be classified as part of the primary occupancy.

Section 305.2.3 Twelve or fewer children in a dwelling unit. Amend to read: ~~Twelve~~ twelve or fewer children in a single family dwelling and having twelve or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the Residential Code.

Section 308.6 Institutional Group I-4, day care facilities. Amend to read: Institutional Group I-4 occupancy shall include buildings and structures occupied by more than twelve persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care
Child day care

Section 308.6.1 Classification as Group E. Amend to read: A child day care facility that provides care for more than twelve but not more than 100 children 2 ½ years of age, where the rooms in which children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

Section 308.6.3 Twelve or fewer persons receiving care. Amend to read: A facility having twelve or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

Section 308.6.4 Five or fewer persons receiving care in a dwelling. Amend to read: A facility such as above within a dwelling unit having twelve or fewer persons receiving custodial care shall be classified as Group R-3 occupancy or shall comply with the International Residential Code.

Section 310.5.1 Amend to read: Care Facilities within a ~~single family~~ dwelling. Care facilities for twelve or fewer persons receiving personal care that are within a single family dwelling are permitted to comply with the International Residential Code.

Section 406.3.4.1 Dwelling unit Separation. Amend to read: The private garage shall be separated from the dwelling unit and its attic area by means of gypsum board, not less than 5/8 inch in thickness, applied to the garage side. Garages beneath habitable rooms shall be separated from all habitable rooms above by not less than a 5/8 inch type X gypsum board or equivalent and 5/8 inch gypsum board applied to structures supporting the separation from habitable rooms above the garage. Door openings between a private garage and the dwelling unit shall be either solid wood doors or solid or honeycomb core steel doors not less than 1 3/8 inch in thickness, or doors in compliance with section 716.5.3 with a fire protection rating of not less than 20 minutes.

Section 706.6 Vertical continuity. Exceptions. Add:

7. Fire walls installed within detached structures of group U or Group S-2 occupancies may terminate at the underside of the roof sheathing provided such walls are not required to be fire-resistance rated construction due to fire separation distance.

Section 902.1 Definitions. Add: COMMERCIAL MOTOR VEHICLE.

Section [F] 903.2.8 Group R: Amend to read: An automatic sprinkler system installed in Section 903.3 shall be provided throughout all buildings with a Group R fire area. ~~except in one and two family dwellings and townhouses.~~

Exception: Single family dwelling or a residential building that contains no more than two dwelling units.

~~Section [F] 903.2.9 Group S-1: Amend item 4 to read: A group S-1 fire area used for storage of commercial trucks, buses, or other similar large vehicles where the fire area exceeds 5,000 square feet.~~

Section [F] 903.2.9 Group S-1. Add item 6:

6. A Group S-1 occupancy where the usage is not determined at time of permit application.

~~Section [F] 903.2.9.1 Repair garages: Amend item 4 to read: A group S-1 fire area used for repair of commercial trucks, buses, or other similar large vehicles where the fire area exceeds 5,000 square feet~~

~~Section [F] 903.2.10.1 Commercial parking garages: Amend to read: An automatic sprinkler system shall be installed throughout buildings used for storage of commercial trucks, buses, or other similar large vehicles where the fire area exceeds 5,000 square feet.~~

Section [F] 903.2.11.3 Buildings 55 feet or more in height. Amend to read: Buildings 55 feet, or five stories or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more located 55 feet, or five stories or more above the lowest level of fire department vehicle access, measured to the finished floor.

Section 903.3.1 Automatic sprinkler systems. Amend to read: Sprinkler systems shall be designed with a 5 psi safety margin and installed in accordance with Sections 903.3.1.1, 903.3.1.2 or 903.3.1.3 and other chapters of this code, as applicable.

Section [F] 903.3.1.2.1 Balconies and decks: Amend to read: Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units and sleeping units where the building is of Type V construction, provided there is a roof, overhang six (6) inches greater, or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch ~~(25 mm)~~ to 6 inches ~~(152 mm)~~ below the structural members and a maximum distance of 14 inches ~~(356 mm)~~ below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

~~Section 905, Standpipe Systems, is amended to read as follows:~~

Section [F] 905.1 General. Add: Class II and III standpipe systems are prohibited. Where required within this section, all standpipe systems shall meet the requirements of a Class 1 standpipe.

Section [F] 907.2.3 Group E. Amend to read: A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. Where approved by the fire code official, a building's emergency communication system interfaced with the fire alarm system in accordance with NFPA 72 is acceptable.

Section [F] 907.2.11.1 Group R-1. Exceptions. Add:

In dwelling units where the ceiling height of a room open to the hallway serving the sleeping rooms exceeds that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and in the adjacent room.

Section [F] 907.2.11.2 Group R-2, R-3, R-4, and I-1. Exceptions. Add:

In dwelling units where the ceiling height of a room open to the hallway serving the sleeping rooms exceeds that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and in the adjacent room.

Section 1011.1 General. Exceptions. Add:

2. Stairways used only to attend equipment or private stairways serving an occupant load of 10 or fewer persons and which are not accessible to the public.

Section 1011.2 Width and capacity. Add:

Exception 4. Stairways used to attend equipment or private stairways serving an occupant load of 10 or fewer persons and which are not accessible to the public.

Section 1011.5.2 Riser height and tread depth. Amend item 3, and Add item 6 to read:

3. In Group R-3 occupancies; within dwelling units in Group R-2 occupancies; and in Group U occupancies that are accessory to a Group R-3 occupancy or accessory to individual dwelling units in Group R-2 occupancies; the maximum riser height shall be 8 inches ; the minimum tread depth shall be 9 inches; the minimum winder tread depth at the walkline shall be 10 inches; and the minimum winder tread depth shall be 6 inches. A nosing projection not less than 3/4 inch but not more than 1 1/4 inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches.

In private stairways serving an occupant load of less than ten (10) and stairways to unoccupied roofs, the maximum riser height shall be 8 inches and the minimum tread depth shall be 9 inches.

Section 1011.11 Handrails. Exceptions. Add:

Stairways used only to attend equipment or private stairways serving an occupant load of 10 or fewer persons and which are not accessible to the public shall have a handrail on at least one side.

Vehicle service pit stairways are exempt from the rules for stairway railings and guards if they would prevent a vehicle from moving into place over the pit.

Section 1015.2 Where required. Amend to read: Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, stairs, ramps and landings, that are located more than 30 inches above the floor or grade below of if within 36 inches horizontally to the edge of the open side the vertical measurement to the floor or grade below is greater than 48 inches.

Guards shall be adequate in strength and attachment in accordance with section 1607.8.

Section 1104.4 Multistory buildings and facilities. Exception 1. Amend to read: An accessible route is not required to stories, basements and mezzanines that have an area of not more than 3,000 square feet, are located above or below accessible levels and are below the third story.

Section 1203.1 General. Amend to read: Buildings shall be provided with natural ventilation in accordance with section 1203.4, or mechanical ventilation in accordance with the International Mechanical Code. Ambulatory care facilities and Group I-1 occupancies shall be ventilated by mechanical means in accordance with section 407 of the International Mechanical Code.

Section 1207 SOUND TRANSMISSION: Delete.

~~Chapter 13 Energy Efficiency: Amend to read: Buildings should be designed and constructed in accordance with the 2009 International Energy Conservation Code.~~

Section 1507.2 Fasteners. Amend to read: Fasteners for asphalt shingles shall be galvanized, stainless steel, aluminum, or copper roofing nails, minimum 12 gage 0.105 inch with a minimum 0.375 inch-diameter head, of a length to penetrate through the roofing materials and a minimum of 0.75 into the roof sheathing or other fasteners as approved by the building official and shingle manufacturer. Where the roof sheathing is less than 0.75 inch thick, the nails shall penetrate through the sheathing. Fasteners shall comply with ASTM F 1667.

Section 1604.3.1. Add: It shall not be the responsibility of the building official to determine engineering requirements of this code. Exclusive of the conventional light-frame wood construction provisions referenced in Section 2308, the method to resist loads as referenced in this chapter is the responsibility of a structural engineer or other qualified design professional.

~~Section 1608.1 General. Amend to read: Design snow loads shall be determined in accordance with section 7 of ASCE 7, but the design roof load shall not be less than that determined by Section 1607 nor less than 30psf (0.96 kN/m²).~~

Section 1610.1 General. Exception: Amend to read: Foundation walls extending not more than 9 feet below grade and laterally

supported at the top by flexible diaphragms shall be permitted to be designed for active pressure.

~~Section 1612 Flood loads. Delete entire section; refer to Chapter 14-04-19 of the Code of Ordinances of the City of Bismarck.~~

Section 1804.4 Site Grading. Amend to read: Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection. Lots shall be graded to drain surface water away from foundation walls. The procedure used to establish the final ground level adjacent to the foundation shall account for additional settlement of the backfill.

Section 1809.5 Frost Protection. Add: Exception

4. Free-standing buildings used as Group U occupancies for the storage of private or pleasure-type motor vehicles constructed in accordance with section 406.3.1.

Section 2902.2 Separate Facilities. Add: Exception 4. Separate facilities shall not be required in business occupancies with a floor area of fifteen-hundred (1,500) square feet or less.

3. ~~2012~~ 2015 International Residential Code (IRC):

Section R104.8.1 Legal Defense. Amend to read: any suit or criminal complaint instituted against an officer or employee because of an act or omission performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be afforded all the immunities and defenses provided by other applicable local, state, or federal laws. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

Section R104.10.1 Flood Hazard areas. Delete:

Section R105.2: Amend to read Section 105.2 Work exempt from permit. Building: Amend item 1 to read:

Building:

One-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed 120 square feet.

Section R108.3 Building permit valuations. Amend to Read: Building permit valuation shall include total value of the work for which a permit is being issued, such as electrical, gas, mechanical, plumbing equipment and other permanent systems, including materials and labor. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. Final building permit valuation shall be set by the building official.

Section R110.1.1: Add: Occupying or permitting occupancy of any building or structure prior to the issuance of a Certificate of Occupancy shall constitute an infraction under the provisions of the Code of Ordinances of the City of Bismarck.

Section R112 Board of Appeals: Delete.

Table R301.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA (1). Add:

Ground snow load: 35 psf
Wind Design speed: 115 mph
Wind Design topographic effects: NO
Wind Design special wind region: NO
Wind Design wind-borne debris zone: NO
Seismic Design Criteria: Zone A
Subject to Damage From weathering: Severe
Subject to Damage from frost depth: 4 feet
Subject to Damage from termite: NO
Winter Design Temp: -19
Ice Barrier Underlayment Required: YES
Flood Hazards: (a)First FIRM adopted in 1985,(b)current/revised FIRM adopted 2014.
Air Freezing Index: 4000
Mean Annual Temp: 42 degrees (F)

Table R302.1 (1) Exterior walls. Add; foot note c. for the first column in walls to read: A common 2-hour fire-resistance- rated wall is permitted for two or more family dwellings where the common wall is on a property line provided such walls do not contain plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. Electrical installations shall be installed in accordance with chapters 34 through 43. Penetrations of electrical outlet boxes shall be in accordance with section 302.4

Section R302.2 Townhouses: Exception 2. Amend to read: Where a sprinkler system is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly or two 1-hour fire-resistance-rated wall assemblies tested in accordance with ASTM E 119 or UL 263. ~~Exception: A common 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not contain plumbing or mechanical equipment, ducts, or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior walls and the underside of the roof sheathing. Penetrations of electrical outlet boxes must be in accordance with section R302.4.~~

Section R302.5.1 Opening protection. Amend to read: Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 $\frac{3}{8}$ inches in thickness, solid or honeycomb-core steel doors not less than 1 $\frac{3}{8}$ inches thick, or 20-minute fire-rated doors.

Section R303.4 Mechanical ventilation. Delete:

Section R307.1 Space required. Amend to read: Fixtures shall be spaced in accordance with the requirements of North Dakota State Plumbing Code and per Figure R307.1, with the exception of the clearance in front of water closets and bidets which shall be at least 24 inches.

Section R310.2.3.1 Ladder and Steps. Amend to read: Window wells with a vertical depth greater than 44 inches shall be equipped with a permanently affixed ladder or steps usable with the window in the fully open position, or shall be equipped with a permanently-attached platform at least 30 inches by 16 inches. The maximum distance between the top of the window well and a platform shall be 42 inches and shall not impede the operation of the window. Ladders or steps required by this section shall not be required to comply with Sections R311.7 and R311.8. Ladders or rungs shall have an inside width of at least 12 inches, shall project at least 3 inches from the wall and shall be spaced not more than 18 inches on center vertically for the full height of the window well.

Exception: Terraced window wells with a maximum of 24 inches per vertical rise and minimum of 12 inches per horizontal projection on each level shall also be allowed.

Section R311.3 Floors and landings at exterior doors. Add: Exception 2. A landing is not required on the outside of exterior doors other than the required egress door, where a stairway with a total rise of less than 30 inches is located on the exterior side of the door, provided the door does not swing over the stairway.

Section R311.3.1 Floor elevations at the required egress door. Exception: Amend to read: The landing or floor on the exterior side shall not be more than 8 inches below the top of the threshold provided the door does not swing over the landing or floor.

Where exterior landings or floors serving the required egress door are not at grade, they shall be provided with access to grade by means of a ramp in accordance with Section R311.8 or a stairway in accordance with Section R311.7.

Section R311.3.2 Floor elevations for other exterior doors. Amend to read: Floor elevations for other exterior doors. Doors other than the required egress door shall be provided with landings or floors not more than 8 inches below the top of the threshold.

Exception: A landing is not required where a stairway with a total rise of less than 30 inches is located on the exterior side of the door, provided the door does not swing over the stairway.

Section R311.7.5.1 Risers. Amend to Read: The Riser height shall not be more than 8 inches. The riser shall be measured vertically between landing edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch. Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees from the vertical. Open risers are permitted provided that the openings located more than 30 inches, as measured vertically, to the floor or grade below do not permit the passage of a 4-inch-diameter sphere.

Exceptions:

1. The opening between adjacent treads is not limited on spiral stairways.
2. The riser height of spiral stairways shall be in accordance with Section R311.7.10.1.

Section R311.7.5.2 Tread depth. Amend to read: The minimum tread depth shall be 9 inches. The tread depth shall be measured

horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch.

Exception: Where a landing is not provided or required by section R311.3, R311.3.2 or R311.7.6, the top tread of a stair serving exterior doors other than the required exit door, and in-swinging doors opening into an attached garage, shall be permitted to exceed the smallest tread by more than 3/8 inch. Such a tread shall be at least 18 inches measured in the direction of travel.

Section R311.7.5.2.1 Winder treads. Amend to read: Winder treads shall have a minimum tread depth of 9 inches measured between the vertical planes of the foremost projection of adjacent treads at the intersections with the walkline. Winder treads shall have a tread depth of not less than 6 inches at any point within the clear width of the stair. Within any flight of stairs, the largest winder tread depth at the walkline shall not exceed the smallest winder tread by more than 3/8 inch). Consistently shaped winders at the walkline shall be allowed within the same flight of stairs as rectangular treads and do not have to be within 3/8 inch of the rectangular tread depth.

Exception: The tread depth at spiral stairways shall be in accordance with Section R311.7.10.1.

Section R311.7.6 Landings for stairways. Exception: Amend to read: Exceptions:

A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided a door does not swing over the stairs.

A landing is not required at the top of an interior flight of stairs with a total rise of less than 30 inches, provided the door does not swing over the stairway.

Section R312.1.1 Where Required. Amend to read: Guards shall be located along open-sided walking surfaces, stairs, ramps and landings that are located more than 30 inches measured vertically to the floor or grade below. Insect screening shall not be considered as a guard.

Section R313 Delete in its entirety.

Section 313.1 Townhouse automatic fire systems. Amend to read: Townhouse automatic fire systems. An automatic residential fire sprinkler system may be installed in townhouses.

Section 313.2 One- and two-family dwellings automatic fire systems. One- and two-family dwellings automatic fire systems. An automatic residential fire sprinkler system may be installed in one- and two-family dwellings.

Section R314.3 Location. Add: 5. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and in the adjacent room.

Section R325.5 Openness. Amend to read: Mezzanines shall be open and unobstructed to the room in which they are located except for walls not more than 36 inches in height., columns and posts.

Section 326.1 General. Amend to read: The design and construction of pools and spas shall comply with the City of Bismarck Ordinance, Title 4, Chapter 4-06, Swimming Pools.

Section R322 Flood-Resistant Construction. Delete: ~~entire section; refer to Chapter 14-04-19 of the Code of Ordinances of the City of Bismarck.~~

Section R403.1.4.1 Frost Protection. Exceptions: Amend to Read:

Protection of freestanding accessory structures of light framed construction shall not be required.

Protection of freestanding accessory structures with an area of 400 square feet or less, of other than light-framed construction shall not be required.

Decks not supported by a dwelling need not be provided with footings that extend below the frost line.

Non-frost protected Foundations supporting detached accessory structures of light frame construction greater than 200 sf must be constructed of monolithic slab-on-grade construction with turned-down footings. Perimeter turned-down footings must be a minimum of 12-inches in depth and eight-inches wide. Perimeter turned-down footings shall have a minimum of one no. 4 bar at the top and at the bottom of the footing. Footings shall not bear on frozen soil.

Section R403.3 – R403.3.4 Frost Protected Shallow Foundations.
Delete:

Table R403.1 (4). Alternate Width and Thickness for Concrete Footings for Light-Frame Construction. Add: Effective, July 1st, 2017.

<u>Story and Type of structure</u>	<u>Footing Width (inches)</u>	<u>Footing Depth (inches)</u>
<u>1 story slab-on-grade</u>	<u>16</u>	<u>8</u>
<u>1 story with crawl space</u>	<u>16</u>	<u>8</u>
<u>1 story plus basement</u>	<u>19</u>	<u>8</u>
<u>2 story slab-on-grade</u>	<u>16</u>	<u>8</u>
<u>2 story with crawl space</u>	<u>16</u>	<u>8</u>
<u>2 story plus basement</u>	<u>23</u>	<u>8</u>
<u>3 story slab-on-grade</u>	<u>16</u>	<u>8</u>
<u>3 story with crawl space</u>	<u>20</u>	<u>8</u>
<u>3 story plus basement</u>	<u>26</u>	<u>8</u>

Notes:

Chart is based on a soil load-bearing value of 1500 psf.

Chart is based on a snow load or roof live load of 30 psf.

Interpolation allowed. Extrapolation is not allowed.

Based on 32-foot-wide house with load-bearing center wall that carries half of the tributary attic, and floor framing. For every 2 feet of adjustment to the width of the house, add or subtract 2 inches of footing width and 1 inch of footing thickness (but not less than 6 inches thick).

Table R404.1.2 (10). Alternate Vertical Reinforcement for 8 inch Concrete Foundation Walls. Add: Effective, July 1st, 2017.

<u>Wall Height (feet)</u>	<u>Unbalanced Backfill Height(feet)</u>	<u>Wall Thickness (inches)</u>	<u>On Center Spacing of Vertical Reinforcement</u>
<u>8</u>	<u>>6</u>	<u>8</u>	<u>#4 at 24"</u>
<u>9</u>	<u>>6</u>	<u>8</u>	<u>#4 at 18"</u>
<u>10</u>	<u>>6</u>	<u>8</u>	<u>#4 at 15"</u>

Notes:

Chart is based on an active soil pressure of 45 pounds per cubic foot (pcf) and soil classes GM, GC, SM, SM-CL and ML.

Reinforcing steel shall be ASTM A615 Fy – 60,000 pounds per square inch (psi).

The vertical reinforcing bars are to be located on the inside face.

Minimum concrete strength Fc1 = 3,000 pounds per square inch (psi).

Backfill shall not be placed until first floor framing and sheathing is installed and fastened or adequately braced and the concrete floor slab is in place or the wall is adequately braced.

Horizontal reinforcement must be installed in accordance with Table 404.1.2 (1).

Design is required for wall heights greater than 10 feet.

Table R404.1.2 (11). Alternate Vertical Reinforcement for 8 inch Concrete Foundation Walls. Add: Effective, July 1st, 2017.

<u>Wall Height (feet)</u>	<u>Unbalanced Backfill Height(feet)</u>	<u>Wall Thickness (inches)</u>	<u>On Center Spacing of Vertical Reinforcement</u>
<u>8</u>	<u>>5</u>	<u>8</u>	<u>#4 at 18"</u>
<u>9</u>	<u>>5</u>	<u>8</u>	<u>#4 at 12"</u>
<u>10</u>	<u>>5</u>	<u>8</u>	<u>#4 at 10"</u>

Notes:

Chart is based on an active soil pressure of 60 pounds per cubic foot (pcf) and soil classes SC, ML-CL and inorganic CL.

Reinforcing steel shall be ASTM A615 Fy – 60,000 pounds per square inch (psi).

The vertical reinforcing bars are to be located on the inside face.

Minimum concrete strength Fc1 = 3,000 pounds per square inch (psi).

Backfill shall not be placed until first floor framing and sheathing is installed and fastened or adequately braced and the concrete floor slab is in place or the wall is adequately braced.

Horizontal reinforcement must be installed in accordance with Table 404.1.2 (1).

Design is required for wall heights greater than 10 feet.

Add: ~~Table R404.1.2(10) Alternative concrete foundation wall reinforcement for light frame construction.~~ Add:

<u>Number of stories</u>	<u>Width of Foundation wall</u>	<u>Width of Footing</u>	<u>Thickness of Footing</u>	<u>Depth of Footing</u>
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	(inches)	s (inches)	(inches)	g Below Finish Grade (feet)
1	8	16	8	4
2	8	16	8	4
3	10	18	10	4
Attache d Garage	6	12	8	4

Additional Notes:

Eight-foot foundation walls must be reinforced as follows: Horizontal bars – two number 4 bars within 12 inches of top of foundation, two number 4 bars in the lower 12 inches of the wall, one number 4 bar in the middle one-third of the wall height, one additional horizontal number 4 bar shall be required for each additional four feet of wall height or fraction thereof, two number 4 bars below each window opening extending 18 inches beyond each side of opening, two number 4 bars vertical on each side of an opening extending 18 inches beyond the opening. A four-foot foundation shall require a minimum of four number 4 bars arranged as required for eight-foot walls.

Detached residential garage foundations may use concrete slab construction providing such slabs are thickened to at least 12 inches at their edges, and such thickness have a horizontal width of at least eight inches at their bottom. Two number 4 bars must be provided in the thickened area of the slab with one located in the top and one located in the bottom of the footing. Reinforcement and must be continuous in the wider portion of the slab and a six-inch by six-inch, ten-gauge reinforcing mesh or shall be installed throughout the slab area in addition to the perimeter reinforcement. Detached garage slabs constructed on fill must be provided with reinforcement conforming to the requirements of specifications of the latest edition of "Concrete Steel Institute Design Handbook". Detached garages that do not utilize on grade slab construction shall have the exterior foundation walls not less than 8 inches thick extending 16 inches below finished grade and be reinforced with not less than two number 4 bars.

Support for open porches, steps, terraces and decks shall consist of frost protected foundations perimeter foundations as required for attached garages in Table R404.1.2, or not less than six (6) inch

~~diameter piers, properly spaced designed to support the imposed loads., which extend to undisturbed soil but not less than four (4) feet below finished grade.~~

Section R404.1.3.2 Reinforcement for foundation walls. Amend to read: Concrete foundation walls shall be laterally supported at the top and bottom. Horizontal reinforcement shall be provided in accordance with Table R404.1.2(1). Vertical reinforcement shall be provided in accordance with Table R404.1.2(2), R404.1.2(3), R404.1.2(4), R404.1.2(5), R404.1.2(6), R404.1.2(7), or R404.1.2(8), or Table R404.1.2(10). Vertical reinforcement for flat basement walls retaining 4 feet or more of unbalanced backfill is permitted to be determined in accordance with Table R404.1.2(9). For basement walls supporting above-grade concrete walls, vertical reinforcement shall be the greater of that required by Tables R404.1.2(2) through R404.1.2(8) or by Section R611.6 for the above-grade wall. In Buildings assigned to Seismic Design Category D0,D1, or D2, concrete foundation walls shall also comply with Section R404.1.4.2.

~~Section R405 Foundation Drainage. Delete exception to Section R405.1.~~

~~Section R501.3 Fire Protection of Floors. Add: Effective date, January 1, 2015.~~

Section R602.7.2 Rim board headers. Revise to read: Rim board header size, material and span shall be in accordance with Table R602.7(1). Rim board headers shall be constructed in accordance with Figure R602.7.2 and shall be supported at each end by full-height studs. Rim board headers supporting concentrated loads shall be designed in accordance with accepted engineering practice.

Section R602.7.5 Supports for headers. Amend to read: Headers shall be supported on each end with one or more jack studs or with approved framing anchors in accordance with Table R602.7(1) or R602.7(2). The full-height stud adjacent to each end of the header shall be end nailed to each end of the header with four-16d nails (3.5 inches x 0.135 inches).

Table R602.7.5 Minimum number of full height studs at each end of headers in exterior walls. Delete:

Section R602.10 Wall Bracing. Add: Exception: The wall bracing requirements of section R602.10 of the 2006 International Residential Code may be used as an alternative to this section.

Section R703.7.2 – Plaster. Add: Approved decorative coatings applied to a concrete or masonry surface shall be installed in accordance with the manufacturer's installation instructions.

Section R905.2.5 Fasteners. Amend to read: Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage [0.105 inch (3 mm)] shank with a minimum 3/8 inch (10 mm) diameter head, ASTM F 1667, of a length to penetrate through the roofing materials and a minimum of 3/4 inch (19 mm) into the roof sheathing or other fasteners as approved by the building official and shingle manufacturer. Where the roof sheathing is less than 3/4 inch (19 mm) thick, the fasteners shall penetrate through the sheathing.

~~Chapter 11 Energy Efficiency. Delete and replace with Chapter 11 of the 2009 International Residential Code.~~

Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements By Component. Climate zone 6, Wood Frame Wall R-Value. Amend to read: 20 or 13+5h,i.

Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements By Component. Climate zone 6, Basement Wall R-Value. Amend to read: 10/13.

Table N1102.1.2 (R402.1.2) Insulation and Fenestration Requirements By Component. Climate zone 6, Crawlspace R-Value. Amend to read: 10/13.

Table N1102.1.4 (R402.1.4) Equivalent U-Factors. Climate zone 6, Frame Wall Factor. Amend to Read: 0.057.

Table N1102.1.4 (R402.1.4) Equivalent U-Factors. Climate zone 6, Basement Wall U-Factor. Amend to Read: 0.059.

Table N1102.1.4 (R402.1.4) Equivalent U-Factors. Climate zone 6, Crawl Space Wall U-Factor. Amend to Read: 0.059.

Section N1102.4 (R402.4) Air leakage (Mandatory). Add: Exception: Dwelling units of R-2 Occupancies and multiple single family dwellings shall be permitted to comply with IECC Section C402.5.

Section N1102.4.1.2 (R402.4.1.2) Testing. The building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding five air changes per hour in Climate Zones 1 through 8. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

Section N1102.4.1.3 (R402.4.1.3) Visual Inspection Option. Add: Visual Inspection Option. Building envelope tightness and insulation shall be considered acceptable when installed in accordance with Table N1102.4.1.1 (R402.4.1.1) - "Air Barrier and Insulation" and has been field verified.

Section 1103.1.1 Programmable Thermostat. Delete:

Section N1103.3.2 (R403.3.2) Sealing (Mandatory). Exception 2. Amend to read: For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams, and locking-type joints and seams.

Section N1103.3.5 (R403.3.5) Building Cavities (Mandatory). Amend to read: Building framing cavities shall not be used as supply ducts.

Section N1103.3.5 (R403.3.5) Mechanical Ventilation (Mandatory). Amend title to read: Ventilation (Mandatory)

Table N1105.5.2(1) [R405.5.2(1)] Specifications for the Standard Reference and Proposed Design. Air exchange rate. Amend to read:

<u>Building Component</u>	<u>Standard Reference Design</u>	<u>Proposed Design</u>
<u>Air exchange rate</u>	<u>Air leakage rate of 5 air changes per hour in Climate Zones 1 through 8 at a pressure of 0.2 inches w.g. (50</u>	<u>For residences that are not tested, the same air leakage rate as the standard reference design. For tested</u>

	<u>Pa). (Balance is unchanged.)</u>	<u>residences, the measured air exchange rate. The mechanical ventilation rated shall be in addition to the air leakage rate and shall be as proposed.</u>
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Section M1503.4 Makeup Air Required. Amend to read: Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19m³/S) shall be mechanically or naturally provided with makeup air at a rate in excess of 400 cfm. Such makeup air systems shall be equipped with not less than one damper. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be accessible for inspection, service, repair and replacement without removing permanent construction or any other ducts not connected to the damper being inspected, serviced, repaired or replaced.

Section 1506.1.1 Required Condensation Provisions. Amend to read: Air exhaust openings shall terminate not less than 3 feet (914 mm) from property lines; 3 feet (914 mm) from operable into the building and 10 feet(3048 mm) from mechanical air intakes except where the opening is located 3 feet (914 mm) above the air intake. Openings shall comply with Sections R303.5.2 and R303.6.

~~Add~~ Section M1701.2.1 Prohibited Sources. Add: Attic spaces shall not be used as a source of combustion air.

M1801.1 Venting required. Amend to read: Fuel-burning appliances shall be vented to the outside in accordance with their manufacturer's installation instructions. Venting systems shall consist of approved chimneys or vents, or venting assemblies that are integral parts of labeled appliances. Gas-fired appliances shall be vented in accordance with Chapter 24.

Section M2101.3 Protection of potable water. Amend to read: The potable water system shall be protected from backflow in accordance with the provisions listed in the North Dakota State Plumbing Code.

Section M2101.10 Tests. Amend to read: New hydronic piping shall be isolated and tested hydrostatically at a pressure of not less than 100-pounds per square inch (psi) (689 kPa). The duration of each test shall be not less than 15 minutes and not more than 20 minutes.

Section M2103.3 Piping Joints. Item 2. Amend to read: Copper tubing shall be joined by brazing complying with the North Dakota State Plumbing Code.

Section G2406.2 Prohibited locations. Exceptions 3 and 4. Delete:

Section G2406.4 Indoor Locations. Add: Any room within a building that contains a condensing appliance must be equipped with a floor drain or other approved means of condensate/liquid waste disposal.

Figure G2407.6.1 (1) All air from indoors-inlet air from ventilated crawl space and outlet air to ventilated attic. Delete:

Figure G2407.6.1 (2) All air from outdoors through ventilated attic. Delete:

Section G2407.11 (304.11) Combustion air ducts. Item 5. Amend to read: Ducts shall not terminate in an attic space.

Section G2413.5 (402.5) Allowable pressure drop. Amend to read: The design pressure loss in any piping system under maximum probable flow conditions, from the point of delivery to the inlet connection of the appliance, shall be such that the supply pressure at the appliance is greater than or equal to the minimum pressure required by the appliance but such pressure loss shall not be greater than .5 inch water column for gas pipe systems operating at less than 2 psi.

Section G2417.4.1 (406.4.3) Test pressure. Amend to read: The test pressure to be used shall not be less than one and one half times the proposed maximum working pressure, but not less than 25 psig, irrespective of design pressure. Where the test pressure exceeds 125 psig the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.

Section G2425.8 (501.8) Appliances not required to be vented. Item 7. Delete:

Section G2425.12 (501.12) Residential and low-heat appliances flue lining systems. Amend to read: Flue lining systems for use with residential-type and low-heat appliances shall be limited to the following:

Clay flue lining complying with the requirements of ASTM C 315 or equivalent when each appliance connected into the masonry chimney has a minimum input rating greater than 400,000 Btu/h. Clay flue lining shall be installed in accordance with Chapter 10.

Listed chimney liner systems complying with UL 1777.

Other approved materials that will resist, without cracking, softening, or corrosion, flue gases and condensate at temperatures up to 1800 F (982 C).

Aluminum (1100 or 3003 alloy or equivalent) not less than 0.032 inches thick up to 8 inches in diameter.

Stainless steel (304 or 430 alloy or equivalent) not less than 26 gauge (0.018 inches thick) to 8 inches in diameter or not less than 24 gauge (0.024 inches thick) 8 inches in diameter and larger.

When a metal liner is used other than a listed chimney liner a condensation drip tee shall be installed and supported in an approved manner.

Section G2427.5.2 (503.5.3) Masonry chimneys. Amend to read: Masonry chimneys shall be built and installed in accordance with NFPA211 and shall be lined as per G2425.12.

Section G2442.5 (618.5) Screen. Amend to read: Required outdoor air inlets shall be covered with a screen having ¼ inch (6.4 mm) openings. Required outdoor air inlets serving a nonresidential portion of a building shall be covered with screen having openings larger than ¼ inch (6.4 mm) and not larger than ½ inch.

Section G2445 UNVENTED ROOM HEATERS. Delete:

Chapters 25 through 43. Delete.

Chapter 25 PLUMBING ADMINISTRATION. Delete:

Chapter 26 GENERAL PLUMBING REQUIREMENTS. Delete:

Chapter 27 PLUMBING FIXTURES. Delete:

Chapter 29 WATER SUPPLY AND DISTRIBUTION. Delete:

Chapter 30 SANITARY DRAINAGE. Delete:

Chapter 31 VENTS. Delete:

Chapter 32 TRAPS. Delete:

Chapter 34 GENERAL REQUIREMENTS. Delete:

Chapter 35 ELECTRICAL DEFINITIONS. Delete:

Chapter 36 SERVICES. Delete:

Chapter 37 BRANCH CIRCUIT AND FEEDER REQUIREMENTS. Delete:

Chapter 38 WIRING METHODS. Delete:

Chapter 39 POWER AND LIGHTING DISTRIBUTION. Delete:

Chapter 40 DEVICES AND LUMINAIRES. Delete:

Chapter 41 APPLIANCE INSTALLATION. Delete:

Chapter 42 SWIMMING POOLS. Delete:

Chapter 43 CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS. Delete:

Appendix E Section AE101.1. Amend to read: These provisions shall be applicable only to a manufactured home used as a single dwelling unit, ~~installed on non-private owned (rental) lots.~~

4. ~~2012~~ 2015 International Mechanical Code (IMC)

Section 109 Means of appeal. Delete.

Section 108.8 Equipment submerged under water. Add: Equipment submerged under water constitutes a fire and health hazard and is considered unsafe equipment. All residential and light commercial furnaces, boiler, and water heaters shall be replaced when any of the following components are submerged under water: gas control valve, burner assembly, electrical control panel, heat exchanger.

The following components may be replaced without replacing the furnace or water heater when they are the only items submerged: furnace blower motor or insulation.

Section 201.3 Terms defined in other codes. Amend to read: Section 201.3 Where terms are not defined in this code and are defined in the International Building Code, International Fire Code, International Fuel Gas Code, National Electrical Code and North Dakota State Wiring Standards or the North Dakota State Plumbing Code, such terms shall have meanings ascribed to them as in those codes.

Section 304.10 Clearance from grade. Amend to read: Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending not less than 2" above adjoining grade or shall be suspended not less than 6" above adjoining grade. Such support shall be in accordance with the manufacturers installation instructions.

Section 305.4 Interval of support. Amend to read: Piping shall be supported at distances not exceeding the spacing specified in Table 305.4, or in accordance with MSS SP-69. In addition to the requirements of Table 305.4, piping and tubing shall be supported within 2 feet of every bend or angle.

Section 307.2.2 Drain pipe materials and sizes. Amend to read: Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of the North Dakota State Plumbing Code relative to the material type. Condensate waste and drain line size shall be not less than 3/4- inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2.

Section 401.2 Natural ventilation. Amend to read: Ventilation. Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical ventilation in accordance with Section 403.

Section 403.1 Ventilation system. Amend to read: Mechanical ventilation shall be provided by a method of supply air and return or

exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The system shall not be prohibited from producing negative or positive pressure. The system to convey ventilation air shall be designed and installed in accordance with Chapter 6.

Exception: The latest version of ASHRAE 62.1 (Ventilation for acceptable indoor air quality) shall be considered to be an acceptable alternative to this section.

Section 505.2 Makeup air required. Amend to read: Exhaust hood systems capable off exhausting in excess of 400 cfm shall be provided with makeup air at a rate in excess of 400 cfm. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Section 508.1.1 Makeup air temperature. Add: Exception: Makeup air shall not be required to be cooled when supplied directly into the kitchen space.

Section 508.2 Compensating hoods. Amend to read: Manufacturers of compensating hoods shall provide a label indicating minimum exhaust flow and/or maximum makeup airflow that provides capture and containment of the exhaust effluent. Short circuit compensating hoods are prohibited.

Add: Section 508.2.1 Compensating Hood Make-up Air. Compensating hoods shall extract at least 40% of the required exhaust air flow from the kitchen area.

Section 509.2 Exhaust fan operation. Add: A hood exhaust fan(s) shall continue to operate after the extinguishing system has been activated unless fan shutdown is required by a listed component of the ventilation system or by the design of the extinguishing system. When the fire-extinguishing system discharges makeup air shall be shut off.

Add: Section 603.12.1 Required Condensation Provisions. All exhaust ducts, such as bathroom fans and dryer vents, if in a conditioned space, must be insulated at the last 5 feet before exiting building to no less than R-4.2. All exhaust ducts, such as bathroom fans and dryer vents, if in an unconditioned space must be insulated to no less than R-6.

Add: Section 701.3 Attic space. Attic space shall not be used for combustion air.

Section 1104.2 Machinery room. Add: Exception 3. If an existing refrigerating system is replaced or if an existing refrigeration plant is increased by not more than 50% of its original capacity, but not more than 100 tons per system using a non-flammable class A1 or B1 refrigerant and the refrigeration machinery room was not provided in the original installation prior to 1994, a refrigeration machinery room shall not be required. If the existing refrigeration is not located in general machinery room separated from occupied spaces, a refrigeration machinery room shall be provided. The space containing the refrigeration machinery shall meet the requirement of Section 1104.3.4, protection room refrigerant decomposition, and Section 1105.3 requiring refrigerant detection. If the requirements of 1104.3.4 and 1105.3 cannot be met, a refrigeration machinery room shall be provided.

5. 2012 2015 International Fuel Gas Code (IFGC)

Add: Section 108.8 Equipment submerged under water. Equipment submerged under water constitutes a fire and health hazard and is considered unsafe equipment. All residential and light commercial furnaces, boilers, and water heaters shall be replaced when any of the following components are submerged under water: gas control valve, burner assembly, electrical control panel, heat exchanger. The following components may be replaced without replacing the furnace or water heater when they are the only things submerged: furnace blower or insulation.

Section 109 Means of appeal. Delete.

Section 303.3 Prohibited locations. Delete: Exceptions 3 and 4.

Section 304 Combustion, ventilation, and dilution air. Delete all references to attic space.

Section 304.6.1 Two permanent openings method. Amend to read: Two permanent openings, one commencing within 12 inches (305 mm) of the top and one commencing within 12 inches (305 mm) of the bottom of the enclosure, shall be provided. The openings shall communicate directly, or by ducts, with the outdoors or spaces that freely communicate with the outdoors.

Where directly communicating with the outdoors, or where communicating with the outdoors through vertical ducts, each

opening shall have a minimum free area of 1 square inch per 4,000 Btu/h (550 mm²/ kW) of total input rating of all appliances in the enclosure.

Where communicating with the outdoors through horizontal ducts, each opening shall have a minimum free area of not less than 1 square inch per 2,000 Btu/h (1,100 mm²/kW) of total input rating of all appliances in the enclosure [see Figure 304.6.1(3)].

Figures 304.6.1(1) and 304.6.1(2).Delete:

Section 304.6.2 One permanent opening method. Amend to Read: One permanent opening, commencing within 12 inches (305 mm) of the top of the enclosure, shall be provided. The appliance shall have clearances of at least 1 inch (25 mm) from the sides and back and 6 inches (152 mm) from the front of the appliance. The opening shall directly communicate with the outdoors or through a vertical or horizontal duct to the outdoors and shall have a minimum free area of 1 square inch per 3,000 Btu/h (734mm²/kW) of the total input rating of all appliances located in the enclosure and not less than the sum of the areas of all vent connectors in the space.

Section 304.11(5) Combustion air ducts. Items 5. Amend to read:

Section 304.11(5) Combustion air ducts. Add: Ducts shall not terminate in an attic space.

Exception. High efficient sealed combustion appliances may obtain combustion air from a well-ventilated attic space provided the installation complies with the manufacturers installation instructions.

Section 305.7 Clearance from grade. Amend to read: Equipment and appliances installed at grade level shall be supported on a level concrete slab or other approved material extending not less than 2 inches (76 mm) above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such supports shall be installed in accordance with the manufacturer's instructions.

Section 310.1 Pipe and tubing other than CSST. Amend to read: Each above ground portion of a gas piping that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. Corrugated stainless steel tubing (CSST)

piping systems listed with an arc resistant jacket or coating system in accordance with ANSI LC-1 shall comply with this section. Where any CSST segments of a piping system are not listed with an arc resistant jacket or coating system in accordance with ANSI LC-1, Section 310.1.1 shall apply.

Section 310.1.1 CSST

Section 310.1.1 CSST. Amend to read: CSST without arc resistant jacket or coating system. CSST gas piping systems and piping systems containing one or more segments of CSST not listed with an arc resistant jacket or coating system in accordance with ANSI LC-1 shall be bonded to the electrical service grounding electrode system or, where provided, the lightning protection grounding electrode system and shall comply with Sections 310.1.1.1 through 310.1.1.5.

Section 403.3 Other materials. Amend to read: Material not covered by the standards specifications listed herein shall be investigated and tested to determine that it is safe and suitable for the proposed service, and, in addition, shall be recommended for that service by the manufacturer and shall be approved by the code official.

Listed LPG hose may be used with natural gas when used for temporary heating at a maximum length of 50 feet.

Add: Section 403.10.1.1 Pipe joints. Gas supply systems with pressures 5 psig or greater and gas pipe joints 2 ½ inches or larger, regardless of pressure, shall be welded.

Section 403.10.4 Metallic fittings. Item 1. Amend to read: Threaded fittings in sizes 2 ½ inches or larger shall not be used except where approved.

Section 406.4 Test pressure measurement. Amend to read: Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made. Dial gauges used to measure test pressures shall be performed with gauges of 2 psi increments or less and have a range not exceeding 100 psi unless otherwise approved.

Section 406.4.1 Test pressure. Amend to read: The test pressure to be used shall be no less than 1 1/2 times the proposed maximum working pressure, but not less than 20 psig irrespective of design

pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.

Section 411.1 Connecting appliances. Item 3. Delete:

Section 411.2 Manufactured home connections. Amend to read: Manufactured homes shall be connected to the distribution piping system by listed and labeled connectors in compliance with ANSI Z21.75/CSA 6.27 and installed in accordance with the manufacturer's installation instructions.

Section 415.1 Interval of support. Amend to read: Piping shall be supported at intervals not exceeding the spacing specified in Table 415.1. Spacing of supports for CSST shall be in accordance with the CSST manufacturer's instructions. In addition to the requirements of Table 415.1, piping and tubing shall be supported within 2 feet of every bend or angle.

Section 501.8 Appliances not required to be vented. Item 8. Delete:

Section 501.12 Residential and low-heat appliances flue lining systems. Amend to read: Flue lining systems for use with residential-type and low-heat appliances shall be limited to the following:

Clay flue lining complying with the requirements of ASTM C 315 or equivalent when each appliance connected into the masonry chimney has a minimum input rating greater than 400,000 Btu/h. Clay flue lining shall be installed in accordance with the International Building Code.

Listed chimney lining systems complying with UL1777.

Other approved materials that will resist, without cracking, softening or corrosion, flue gases and condensate at temperatures up to 1,800°F (982°C).

Aluminum (1100 or 3003 alloy or equivalent) not less than 0.032 inches thick to 8 inches diameter.

Stainless steel (304 or 430 alloy or equivalent) not less than 26 gauge (0.018 inches thick) to 8 inches diameter or not less than 24 gauge (0.024 inches thick) 8 inches diameter and larger.

When a metal liner is used other than a listed chimney liner a condensation drip tee shall be installed and supported in an approved manner.

Section 503.5.3 Masonry chimneys. Amend to read: Masonry chimneys shall be built and installed in accordance with NFPA 211 and shall be lined as per Section 501.12.

Section 503.5.6.1 Chimney lining. Amend to read: Chimneys shall be lined in accordance with NFPA 211 and Section 501.12.

Exception: Where an existing chimney complies with Sections 503.5.6 through 503.5.6.3 and its sizing is in accordance with Section 503.5.5, its continued use shall be allowed when, in more than one appliance venting system the secondary appliance, such as a water heater, is replaced and the primary heating appliance remains.

Delete: Section 621 Unvented room heaters

6. 2015 International Energy Conservation Code.

Table (R402.1.2) Insulation and Fenestration Requirements By Component. Climate zone 6, Wood Frame Wall R-Value. Amend to read: 20 or 13+5h,i.

Table (R402.1.2) Insulation and Fenestration Requirements By Component. Climate zone 6, Basement Wall R-Value. Amend to read: 10/13.

Table (R402.1.2) Insulation and Fenestration Requirements By Component. Climate zone 6, Crawlspace R-Value. Amend to read: 10/13.

Table (R402.1.4) Equivalent U-Factors. Climate zone 6, Frame Wall Factor. Amend to Read: 0.057.

Table (R402.1.4) Equivalent U-Factors. Climate zone 6, Basement Wall U-Factor. Amend to Read: 0.059.

Table (R402.1.4) Equivalent U-Factors. Climate zone 6, Crawl Space U-Factor. Amend to Read: 0.059.

Section R402.4 Air leakage (Mandatory) Add: Exception. Dwelling units of R-2 occupancies and multiple single family dwellings shall be permitted to comply with IECC Section C402.5.

Section R402.4.1.2 Testing. Amend to read: The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zones 1 through 8.

Add: Section R402.4.1.3 Visual Inspection Option. Building envelope tightness and insulation shall be considered acceptable when installed in accordance with Table R402.4.1.1 - "Air Barrier and Insulation" and has been field verified.

Section R403.3.2 Sealing (Mandatory). Exception 2. Amend to read: For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams, and locking-type joints and seams.

Section R403.3.5 Building cavities (Mandatory) Amend to read: Building framing cavities shall not be used as supply ducts.

Section R403.6 Mechanical ventilation (Mandatory). Amend to read: Ventilation (Mandatory)

Table R405.5.2(1) Specifications for the Standard Reference and Design: Amend to read:

<u>Building Component</u>	<u>Standard Reference Design</u>	<u>Proposed Design</u>
<u>Air exchange rate</u>	<u>Air leakage rate of 5 air changes per hour in Climate Zones 1 through 8 at a pressure of 0.2 inches w.g. (50 Pa). (Balance is unchanged.)</u>	<u>For residences that are not tested, the same air leakage rate as the standard reference design. For tested residences, the measured air exchange rate. The mechanical ventilation rated shall be in addition to the air leakage rate and shall be as proposed.</u>

~~6. Wiring Standards of North Dakota.~~

~~Article 24-02-01-03 General requirements. Add paragraph 9. All occupancies shall be wired in an approved raceway system.~~

~~Exception: R-2, R-3 and R-4 occupancies may be wired in any method permitted.~~

~~(Ord. 4281, 8-23-89; Ord. 4314, 2-06-90; Ord. 4452, 07-21-92; Ord. 4688, 05-23-95; Ord. 4776, 07-23-96; Ord. 4911, 05-26-98; Ord. 4958, 12-21-98; Ord. 5316, 05-25-04; Ord. 5578, 02-26-08; Ord. 5802, 02-22-11; Ord. 6035, 04-08-14; Ord. 6035, 04-08-14)~~

Section 3. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 4. Effective Date. This ordinance shall take effect following final passage, adoption and publication.

- Ordinance 6244, an ordinance text amendment relating to Title 4 (Building Regulations/Residential Pools) - Section 4-06-10, initiated by the City of Bismarck. Staff recommends approval.

ORDINANCE NO. 6244

AN ORDINANCE TO AMEND SECTION 4-06-10 OF THE BISMARCK CODE OF ORDINANCES RELATING TO RESIDENTIAL POOLS.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 4-06-10 of the City of Bismarck Code of Ordinances relating to Residential Pools is hereby amended and re-enacted to read as follows:

4-06-10. Residential Pools. Residential swimming pools are subject to the following:

* * * * *

Outdoor Residential Swimming Pool

Unless excepted by this section, All outdoor swimming pools, shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least 72 inches above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches when a grade is a solid surface such as concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 45 inches apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pools, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

EXCEPTIONS:

a. Spas and hot tubs with a lockable safety cover that complies with ASTM F 1346.

b. Swimming pools with a powered safety cover that complies with ASTM F 1346.

* * * * *

(Ord. 4865, 08-26-97; Ord. 5316, 05-25-04)

Section 2. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. Effective Date. This ordinance shall take effect following final passage, adoption and publication.

- Ordinance 6246 relating to zoning change for Eden's Subdivision, requested by K & M Northland Properties and Jerry Hauff. Bismarck Planning & Zoning Commission recommends approval.

ORDINANCE NO. 6246

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 14-03-02 OF THE 1986 CODE OF ORDINANCES, OF THE CITY OF BISMARCK, NORTH DAKOTA, AS AMENDED, RELATING TO THE BOUNDARIES OF ZONING DISTRICTS.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 14-03-02 of the Code of Ordinances of the City of Bismarck, North Dakota is hereby amended to read as follows:

The following described property shall be excluded from the A-Agricultural zoning district and included in the RR-Residential zoning district:

Eden's Subdivision.

Section 2. Repeal. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 3. Taking Effect. This ordinance shall take effect upon final passage, adoption and publication.

- Ordinance 6247 relating to zoning change for Lots 7-12, Block 37, Governor Pierce Addition, requested by Neuberger Holdings, LLC. Bismarck Planning & Zoning Commission recommends approval.

ORDINANCE NO. 6247

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 14-03-02 OF THE 1986 CODE OF ORDINANCES, OF THE CITY OF BISMARCK, NORTH DAKOTA, AS AMENDED, RELATING TO THE BOUNDARIES OF ZONING DISTRICTS.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 14-03-02 of the Code of Ordinances of the City of Bismarck, North Dakota is hereby amended to read as follows:

The following described property shall be excluded from the CG-Commercial zoning district and included in the MA-Industrial zoning district:

Lots 7-12, Block 37, Governor Pierce Addition.

Section 2. Repeal. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

Section 3. Taking Effect. This ordinance shall take effect upon final passage, adoption and publication.

- 2016 Bismarck Infill and Redevelopment Plan, requested by the Community Development Department. Bismarck Planning & Zoning Commission recommends approval.

F. The Board of City Commissioners considered the request for approval from the Engineering Department for approval of a time extension until March 1, 2017 with Dynatest North America, Inc.

On May 10, 2016, the Board entered into a Professional Services Agreement with Dynatest North America, Inc. for the Automated Data Collection and Assessment Services Project. This project was to perform semi-automated pavement surveys for approximately one-third of the streets within the city, update the City's pavement management database and provide an assessment of the pavement in the collection areas as it relates to other streets within the city.

While the pavement surveys, the database update and the pavement assessment were completed before the November 1, 2016 completion dates, the draft report was completed after that date. As of January 3, 2017, the draft report is complete and a presentation for the commission is being prepared. This presentation will take place at a later date.

G. The Board of City Commissioners considered the request for approval from the Fire Department for the following items:

- Adopt the Bismarck Emergency Operations Plan.

The last approval of the Bismarck Emergency Operations Plan was back in 2009. The Emergency Operations Plan is a living document, however, it's a good practice to update the resolution and formally adopt the local emergency operations plan on a regular basis.

RESOLUTION

ADOPTING THE 2017 BISMARCK EMERGENCY OPERATIONS PLAN FOR THE CITY OF BISMARCK, ND

WHEREAS, the City of Bismarck has been and continues to be committed to the protection of life, property, and the environment from natural, technological, and human-caused hazards; and

WHEREAS, the City of Bismarck recognizes the threat that natural, technological, or human-caused hazards pose to people and property within the City; and

WHEREAS, the 2017 Bismarck Emergency Operations Plan provides the framework for emergency/disaster preparedness, response and recovery and is the result of on-going planning efforts coordinated by Bismarck Emergency Management in cooperation with governmental and non-governmental stakeholders; and

WHEREAS, Bismarck Emergency Management and applicable City departments will coordinate implementation of the plan and continue to engage stakeholders in the review and update of the plan; and

WHEREAS, the City of Bismarck recognizes that it's a shared responsibility and commitment with citizens, private business, volunteer organizations, as well as federal, state, and local government to effectively prepare, respond and recover from emergencies and disasters.

NOW, THEREFORE, BE IT RESOLVED by the Board of City Commissioners of the City of Bismarck, North Dakota, a municipal corporation: 1) The 2017 Bismarck Emergency Operations Plan is hereby adopted by the Bismarck City Commission as the City's Emergency Operations Plan; 2) The Emergency Operations Plan will be re-promulgated every five years; 3) Non-substantial changes may be made without formal city commission approval; and 4) Additional plans or appendices (ex: Flood Response Plan, Emergency Operations Center Guide) that serve as an extension of the Emergency Operations Plan do not require city commission approval.

Adopted this 10th day of January, 2017.

- Introduction of and call for a Public Hearing on Ordinance 6245 relating to Amendments (Fire Code).

ORDINANCE NO. 6245

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 4-07-06 OF THE BISMARCK CODE OF ORDINANCES (REV.) RELATING TO AMENDMENTS (FIRE CODE).

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

Section 1. Amendment. Section 4-07-06 of the City of Bismarck Code of Ordinances (1986 Rev.) relating to Amendments is hereby amended and re-enacted to read as follows:

4-07-06. Amendments. The International Fire Code adopted by the provisions of this article is hereby amended as follows:

1. Chapter 1. Administration.

Section 101, General, is amended to read as follows:

Section 101.1 Title. These regulations shall be known as the City of Bismarck Fire Prevention Code, hereafter referred to as "this code."

Section 103. Department of Fire Prevention. Deleted.

Section 105.1.1 Permits Required is amended to read as follows:

A property owner or owner's authorized agent who intends to conduct an operation or business, or install or modify systems and equipment that are regulated by this code, or to cause any such work to be performed, shall first make application to the fire code official permit and may be required to obtain a permit.

Section 105.6.1 through 105.6.48 are amended to read as follows:

The specified permits identified in each operational section as "being required" are amended to "required upon the determination of the code official."

Section 105.7 required construction permits is amended to read as follows:

The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.18. The fire code official may utilize existing permitting and approval processes already established in Community Development, Engineering or other departments.

Section 108 Board of Appeals: Deleted.

Section 109, Violations, is amended in part to read as follows:

Section 109.4 Violation penalties. A person who violates a provision of this code or who fails to comply with any of the requirements thereof or who erects, installs, alters, repairs or does work in violation of the approved construction documents or directives of the fire code official, or of a permit or certificate used under the provisions of this code, shall be guilty of an infraction. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 111, Stop Work Order, is amended in part to read as follows:

Section 111.4 Failure to comply. Any person who continues any work after having been served with a stop work order, except work as that person is directed to perform to remove a violation of unsafe condition, shall be guilty of an infraction.

2. Chapter 2. Definitions

Section 202 General Definitions is amended as follows:

Commercial Motor Vehicles is amended to read as follows: A motor vehicle used to transport passengers or proper, or motorized equipment where the motor vehicle(s) or equipment:

1. Has a gross vehicle weight rating of 10,000 pounds or more or
2. Have combined weights greater than 26,000 lbs. or
3. Is designed to transport 16 or more passengers, including the driver

~~Fireworks, 1.4G to add the following: The definition includes those items defined or otherwise listed in NDCC 23-15-01, as that section may be amended from time to time. is deleted in its entirety and replaced with the following:~~

Those items defined or otherwise listed in NDCC 23-15-01.

Occupancy classifications Educational Group E, day care facilities.

Change “five” to read “twelve”

~~Occupancy classifications [B] Residential Group R-3, Care facilities within a dwelling.~~

~~Care facilities for twelve or fewer persons receiving care that are within a single-family dwelling are permitted to comply with the International Residential Code.~~

Educational group E.

Occupancy classifications Educational Group E, day care facilities is amended to read as follows: This group includes buildings and structures or portions thereof occupied by more than twelve children older than 2 ½ years of age who receive educational, supervision or personal care services for less than 24 hours per day.

Five or fewer children. Amend to read:

Twelve or fewer children. A facility having twelve or fewer children receiving such day care shall be classified as part of the primary occupancy.

Educational Group E.

Occupancy classifications Educational Group E, Five or fewer children in a dwelling unit is amended to read as follows: A facility such as the above within a dwelling unit and having Twelve or fewer children receiving such

care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

Institutional Group I-4, day care facilities. Amend to read:

Institutional Group I-4 occupancy shall include buildings and structures occupied by more than twelve persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care.

Child day care.

Classification as Group E. Amend to read:

A child day care facility that provides care for more than twelve but not more than 100 children 2 ½ years of age, where the rooms in which children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

Five or fewer persons receiving care. Amend to read:

A facility having twelve or fewer persons receiving custodial care shall be classified as part of the primary occupancy.

Five or fewer persons receiving care in a dwelling. Amend to read:

A facility such as above within a dwelling unit having twelve or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

Care Facilities within a dwelling. Amend to read:

Care facilities for twelve or fewer persons receiving personal care that are within a single family dwelling are permitted to comply with the International Residential Code.

3. Chapter 3. General Requirements.

Section 308, Open Flames, is amended in part to read as follows:

~~Section 308.1.4, Open flame cooking devices. Amend Exemption 3: 2.5 pounds to read 20 pounds. Devices using deep oil containers, i.e. turkey~~

~~fryers, shall not be included in this exception.~~ Open-flame cooking devices is amended to read as follows:

Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or decks or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system.
3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 47.8 pounds [nominal 20 pounds (9 kg) LP-gas capacity]. Devices using deep oil containers, (i.e. turkey fryers), are not included in this exception.

Section 308 Open Flames. Section 308.3 Group A Occupancy is amended to read by adding the following subsection 1.4 to exception 1:

1.4 Open-flame devices for food warming.

Vacant premises.

Section 311.6 Unoccupied tenant spaces in mall buildings.

Item 1 is amended to read as follows:

1. Storage is kept to a minimum and is neat and orderly.

~~4. Chapter 4 Emergency Planning and Preparedness~~

~~Section 408, Use and Occupancy-Related Requirements, is amended to read as follows:~~

~~Section 408.11.3 Item 1.~~

~~Keep storage of any materials neat and orderly.~~

~~54. Chapter 5 Fire Service Features Apparatus Access Roads.~~

Section 503.2.3 Surface is amended to read as follows:

Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus, shall be surfaced so as to provide all weather driving capabilities, and shall meet the specifications of the City Engineering Department.

Fire Service Features.

Section 510, Emergency Responder Radio Coverage, is amended to read as follows:

Section 510.4 Technical requirements. Systems, components and equipment required to provide emergency responder radio coverage shall comply with technical requirements established at issuance of the construction permit.

Section 510.5 Installation requirements. Delete

Section 510.6 Maintenance. The emergency responder radio coverage system shall be maintained at all times in accordance with the requirements established at issuance of the construction permit, and with Sections 510.6.2 and 510.6.3.

65. Chapter 9. Fire Protection Systems.

Section 903, Automatic Sprinkler Systems, is amended to read as follows:

Section 903.2.8 Group R.

An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with Group R fire area, except ~~in one and two family dwellings and townhouses.~~ in a single family dwelling or a residential building that contains no more than two dwelling units.

~~Section 903.2.9 Group S-1, Item 4~~

~~A Group S-1 fire area used for storage of commercial trucks, buses, or other similar large vehicles where the fire area exceeds 5,000 square feet (464 m²).~~

~~Section 903.2.9.1 Repair garages, Item 4~~

~~A Group S-1 fire area used for the repair of commercial trucks, buses, or other similar vehicles where the fire area exceeds 5,000 square feet (464 m²).~~

Section 903.2.9 is amended to read by adding condition 6.

6. A Group S-1 occupancy where the usage is not determined at time of permit application.

~~Section 903.2.10.1 Commercial parking garages.~~

~~An automatic sprinkler system shall be provided throughout buildings used for storage of commercial trucks, buses or other similar vehicles where the fire area exceeds 5,000 square feet (464 m²).~~

Automatic sprinkler systems.

Section 903.2.11.3 is amended to read as follows:

Buildings 55 feet, or five stories or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories with an occupant load of 30 or more located 55 feet, or five stories or more above the lowest level of fire department vehicle access, measured to the finished floor.

Automatic sprinkler systems.

Section 903.3.1 Standards is amended to read as follows:

Sprinkler systems shall be designed with a 5 psi safety margin and installed in accordance with Sections 903.3.1.1, 903.3.1.2 or 903.3.1.3 and other chapters of this code, as applicable.

Section 903.3.1.2.1 Balconies and decks.

Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units and sleeping units where the building is of Type V construction, provided there is a roof, overhang six (6) inches greater, or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.

Section 905, Standpipe Systems, is amended to read as follows:

Section 905.1 General. Add:

Class II and III standpipe systems are prohibited. Where required within this section, all standpipes systems shall meet the requirements of a Class I standpipe.

Section 907, Fire alarm and detection systems

Section 907.2.3 Group E Add:

Where approved by the fire code official, a building's emergency communication system interfaced with the fire alarm system in accordance with NFPA 72 is acceptable.

Section 907.2.11.1 Group R-1. Exceptions. Add:

In dwelling units where the ceiling height of a room open to the hallway serving the sleeping rooms exceeds that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and in the adjacent room.

Section 907.2.11.2 Group R-2, R-3, R-4 and I-1. Exceptions. Add:

In dwelling units where the ceiling height of a room open to the hallway serving the sleeping rooms exceeds that of the hallway by 24 inches or more, smoke detectors shall be installed in the hallway and in the adjacent room.

6. Chapter 10. Means of Egress.

Section 1011.1 General. Exceptions. Add:

Stairways used only to attend equipment or private stairways serving an occupant load of 10 or fewer persons and which are not accessible to the public.

Section 1011.2 Width and capacity. Add:

Exception. Stairways used to attend equipment or private stairways serving an occupant load of 10 or fewer persons and which are not accessible to the public.

Section 1011.5.2 Riser height and tread depth. Amend item 3 and add item 6 to read:

3. In Group R-3 occupancies; within dwelling units in Group R-2 occupancies; and in Group R-3 occupancy or accessory to individual dwelling units in Group R-2 occupancies; the maximum riser height shall be 8 inches; the minimum tread depth shall be 9 inches; the minimum winder tread depth at the walk-line shall be 10 inches; and the minimum winder tread depth shall be 6 inches. A nosing projection not less than $\frac{3}{4}$ inch but not more than $1\frac{1}{4}$ inches shall be provided on stairways with solid risers where the tread depth is less than 11 inches.

6. In private stairways serving an occupant load of less than ten (10) and stairways to unoccupied roofs, the maximum riser height shall be 8 inches and the minimum tread depth shall be 9 inches.

Section 1011.11 Handrails. Exceptions, Add:

Stairways used only to attend equipment or private stairways serving an occupant load of 10 or fewer persons and which are not accessible to the public shall have a handrail on at least one side.

Vehicle service pit stairways are exempt from the rules for stairway railings and guards if they would prevent a vehicle from moving into place over the pit.

Section 1015.2 Where required. Amend to read:

Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, stairs, ramps, and landings that are located more than 30 inches above the floor or grade below if within 36 inches horizontally to the edge of the open side of the vertical measurement to the floor or grade below is greater than 48 inches. Guards shall be adequate in strength and attachment in accordance with section 1607.8.

7. Chapter 11. Construction Requirements for Existing Buildings

Section 1103, Fire Safety Requirements for Existing Buildings, is amended to read as follows:

Section 1103.6.1 Existing multiple-story buildings. Change 50 feet (15 240 mm) to read five (5) stories.

~~Section 1103.9 Carbon monoxide alarms.~~

~~Add: Stand-alone carbon monoxide alarms would be allowed until such time as the fire alarm system is updated.~~

8. Chapter 56. Explosives and Fireworks.

Section 5601, General, is amended to read as follows:

Section 5601.1.3, Fireworks. The possession, manufacture, storage, sale, handling, and use of fireworks are prohibited. Amended as follows:

Delete Exceptions 2 and 4.

Section 5601.2.4, Financial Responsibility. The permittee shall furnish a bond or insurance in an amount deemed adequate by the board of city commissioners, but not less than two hundred and fifty thousand dollars (\$250,000.00) per individual or one million dollars (\$51,000,000.00) per occurrence, conditioned for the payment of all potential damages which may be caused either to a person or persons or to property by reason of the permitted display, and arising from any act of the permittee, its agents, employees or subcontractors.

~~Section 5601.2.4.1 and 5601.2.4.2, Fireworks display and blasting is hereby amended by substituting the following paragraph:~~

9. Chapter 57. Flammable and Combustible Liquids.

Section 5704, Storage, is amended to read as follows:

Section 5704.2.9.6.1, Locations where above-ground tanks are prohibited. Amend to read:

Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited in all zoning districts within the corporate boundaries of the City of Bismarck, with the exception of Industrial, Agricultural, and Public (MA, MB, A, P) districts.

Section 5704.2.12.2 is deleted in its entirety and replaced with the following:

Documentation of tightness testing shall be provided to the fire department. Piping shall be tested in accordance with Section 5703.6.3.

Section 5706, Special Operations, is amended to read as follows:

Section 5706.2.4.4, Locations where above-ground tanks are prohibited. Amend to read:

Storage of Class I and II liquids in permanent above-ground tanks outside of buildings is prohibited in all zoning districts within the corporate boundaries of the City of Bismarck, with the exception of Industrial, Agricultural, and Public (MA, MB, A, P) districts.

10. Chapter 61. Liquefied Petroleum Gases.

Section 6104, Location of LP-Gas Containers, is amended to read as follows:

Section 6104.2, Maximum capacity within established limits, the first paragraph is amended to read:

Within residentially-zoned districts of the corporate boundaries of the City of Bismarck, storage of liquefied petroleum gas used as ~~a permanent fuel gas supply to a structure~~ to supply a structure or for any other use shall not exceed a maximum water capacity of 29 gallons (109 L).

In all other districts, except for Industrial, Agricultural, and Public districts (MA, MB, A, P), the maximum ~~aggregate~~ capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L).

* * * * *

(Ord. 4145, 4-28-87; Ord. 4302, 11-07-89; Ord. 4379, 6-18-91; Ord. 4688, 05-23-95; Ord. 4744, 01-09-96; Ord. 4911, 05-26-98; Ord. 5316, 05-25-04; Ord. 5497, 04-25-06; Ord. 5654, 02-26-08; Ord. 5707, 02-24-09; Ord. 5803, 02-22-11; Ord. 6035, 04-08-14)

Section 2. Severability. If any section, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

Section 3. Effective Date. This ordinance shall take effect following final passage, adoption and publication.

H. The Board of City Commissioners considered the request for approval from the Human Resources Department for the Education and Training Policy Revision.

The City of Bismarck has updated the Education and Training Policy to better facilitate utilization by the workforce for the mutual benefit of the City of Bismarck and staff. The Human Resources Department recommends approval of the policy changes.

I. The Board of City Commissioners considered the request for approval from the Police Department for authorization to trade in a seized/forfeited narcotics vehicle on the purchase of a replacement narcotics vehicle.

One of the department's narcotic investigators is currently driving a 2007 Chevrolet Suburban with over 110,000 miles; this was a 2014 drug forfeiture vehicle. The vehicle needs to be rotated out as it is used for surveillance and is now known by many suspects. The department was approved for \$20,000 towards the purchase of a vehicle from the 2017 Drug Budget. The department requests permission to trade the Suburban in to purchase a 2014 Ford Expedition at \$35,900. The department would receive \$15,900 as a trade-in value, which leaves the balance at \$20,000 which is the exact amount they have per the budget. Sgt. Roger Marks has checked with numerous local car dealerships and this is the best option that fits the needs of the department.

J. The Board of City Commissioners considered the request for approval from the Public Works Service Operations Department for the following items:

- Approval of Contract Change Order with HDR to extend timeline until December 31, 2017 for the Solid Waste Management Collection Evaluation.
- Approval of Contract Change Order with Houston Engineering, Inc. to extend timeline until December 31, 2017 for the Solid Waste Landfill Design.
- Request permission for the emergency purchase of a 2017 Fair Manufacturing Snow Blower Model 948D.

The City has been unseasonably hit with three blizzards since November 28, 2016 and received record snowfall in November and December of 2016. Due to the 53 plus inches of snow, along with the blowing and drifting snow, the City's two Canadian made casting blowers are critical to our operation. Last week, one of the casting blowers was damaged and we are now waiting three plus weeks for parts to cross the border from Canada. If city staff has any trouble with the remaining casting blower, it will severely impact our ability to cast snow and clear streets in a timely manner. The other three snow blowers do not cast snow; they are for loading trucks when we haul snow. To continue opening up the City in a timely manner, city staff needs casting blowers that we can repair and get back in service as soon as possible.

City staff has contacted two other local distributors of casting blowers, Swanston Equipment and Titan Machinery. They determined that the RDO Fair Manufacturing Snow Blower model 948D is the lowest price based on the side of engine and base components (quotes for all three machines were included in the agenda packet for this item).

K. Addendum Item: Consider request for approval from the Administration Department for introduction of and call for a public hearing on a request from Central States Dispatch Inc. to obtain a new Taxi Cab License.

Commissioner Marquardt requested to pull the first, second and fifth bullets under Item #2E (Ordinances 6243 and 6244 and 2016 Bismarck Infill) and the third bullet under Item #2J (snow blower). Commissioner Askvig asked to pull Item #2H. Commissioner Askvig made a motion to approve the remaining items on the consent agenda. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

Item #2E, Bullet 1: Introduction of and call for the public hearing on Ordinance 6243, an ordinance text amendment relating to Title 4 (Building Regulations) - Section 4-02-02, initiated by the City of Bismarck. Staff recommends approval.

Item #2E, Bullet 2: Introduction of and call for the public hearing on Ordinance 6244, an ordinance text amendment relating to Title 4 (Building Regulations/Residential Pools) - Section 4-06-10, initiated by the City of Bismarck. Staff recommends approval.

Brady Blaskowski, Building Official, appeared before the Board. He said he's been working with the Home Builders Association and will have some changes, as agreed upon by both parties, that he will propose at the next meeting when the public hearing will take place.

Item #2E, Bullet 5: Introduction of and call for the public hearing on the 2016 Bismarck Infill and Redevelopment Plan, requested by the Community Development Department. Bismarck Planning & Zoning Commission recommends approval.

Commissioner Marquardt asked Daniel Nairn, Planner, about the questions that arose at the public meeting held at the Bismarck Veterans Memorial Public Library and if staff has researched those questions. Mr. Nairn appeared and said there were a lot of good questions received at the public meeting held on November 3, 2016. One of the major issues was geographical scope of the plans so they made some changes that would apply to the entire city. The other concerns heard at that meeting were from neighbors about opening up new development that wouldn't be compatible with the current neighborhood so they made some changes to the plan that infill should meet certain design principles to match the existing concepts, especially in the historic areas and older neighborhoods. President Seminary asked how many people were involved in the drafting of this plan. Mr. Nairn said they had a technical advisory committee with approximately 14-15 people and then consulted 15-20 additional people in private interviews. President Seminary asked how many are from the private sector. Mr. Nairn said a majority of them are.

Commissioner Marquardt made a motion to introduce and call for public hearings on Ordinances 6243 and 6244. Commissioner Askvig seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

Commissioner Marquardt expressed concerned with the plan and said some of the public said we are moving too fast on this. Commissioner Marquardt moved to not go forward with the public hearing for 2016 Bismarck Infill and Redevelopment Plan at this time. The motion died for the lack of a second.

Commissioner Askvig made a motion to introduce and call for a public hearing on the 2016 Bismarck Infill and Redevelopment Plan. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Guy, Oban, and President Seminary. Nays: Commissioner Marquardt, the motion carried.

Item #2H: The Board of City Commissioners considered the request for approval from the Human Resources Department for the Education and Training Policy Revision.

Commissioner Askvig asked what's different about this new policy since there isn't any strikethrough or underlining on it to track the changes. Robert McConnell, Human Resources Director, appeared and said different institutions have different class schedules so they changed it so reimbursement will be limited to three courses per calendar year, up to \$1,000 per course. Commissioner Askvig suggested to city staff to show what the changes are being proposed.

Commissioner Askvig made a motion to approve the request. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

Item #2J, Bullet 3: Request permission for the emergency purchase of a 2017 Fair Manufacturing Snow Blower Model 948D.

Jeff Heintz, Public Works Service Operations Director, appeared and presented some additional information that was not in the agenda packet. Basically it's a time sensitive issue because the parts have to come over the border from Canada. Commissioner Askvig said we are intending to then have three casting blowers after the one is repaired. Mr. Heintz said that's correct.

Commissioner Marquardt made a motion to approve the request. Commissioner Askvig seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

REGULAR AGENDA

Commissioner Marquardt read a Resolution of Appreciation from the Horizon Heights Homeowners Association to the city of Bismarck, Burleigh County, ND State Highway Patrol, snow removal services, emergency services, law enforcement, fire protection, contractors, and helpful neighbors.

President Seminary said he would be moving Items #8 and #9 on the Regular Agenda after Item #4.

3. Public comment (restricted to items on the Regular Agenda, excluding public hearing items).

No persons appeared to give public comment.

4. Addendum Item: The Board of City Commissioners considered the request for approval from the Fire Department accept an offer for digital billboard space to promote the Adopt a Hydrant program.

Joel Boespflug, Fire Chief, appeared and explained that Michael Bushendorf, ND Sales Manager of Dakota Outdoor Advertising, has offered space on five digital billboards throughout Bismarck to promote the Adopt a Hydrant Program. The offer is made at no cost to the City and Mr. Bushendorf will promote the program for three to four weeks, or as long as needed. City staff recommends approval.

Michelle Klose, Public Works Utility Operations Director, appeared before the Board to give a status update on the hydrant cleaning project. She said certain areas need additional assistance and they will assist that but they encourage citizens to get together and clear those hydrants as a neighborhood. They wish to thank the citizens for their assistance because that saves the Fire Department from having to clear the snow around a hydrant which significantly slows them when they respond to fight a fire.

Commissioner Askvig made a motion to approve the request. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

8. The Board of City Commissioners considered the request for approval from the Administration Department to review, discuss and approve of the 2017 Legislative Report #1.

Keith Hunke, City Administrator, appeared before the Board. He said as of yesterday, 286 House Bills and 157 Senate Bills have been filed for a total of 443 bills. Before the Board tonight is a listing of 24 bills that they would like the Board's consideration for legislative position. Staff is proposing to monitor 15 of the 24 bills on this listing and nine bills they would like the Board to take specific action on.

HB 1026 - Support

Commissioner Askvig made a motion to approve the request for support of HB 1026. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

HB 1027 – Support

Commissioner Oban made a motion to approve the request for support of HB 1027. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

HB 1258 - Oppose

Commissioner Askvig made a motion to approve the request to oppose HB 1258. Commissioner Oban seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

HB 1276 – Oppose

Commissioner Askvig made a motion to approve the request to oppose HB 1276. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Guy, Oban, and President Seminary. Nays: Commissioner Marquardt, the motion carried.

HB 1278 - Oppose

Commissioner Askvig made a motion to approve the request to oppose HB 1278. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

HB1279 - Oppose

Commissioner Marquardt made a motion to approve the request to oppose HB 1279. Commissioner Oban seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

SB 2006 - Support

Commissioner Marquardt made a motion to approve the request for support of SB 2006. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

SB 2054 - Support

Commissioner Guy made a motion to approve the request for support of SB 2054. Commissioner Oban seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

SB 2086 - Oppose

Commissioner Askvig made a motion to approve the request to oppose SB 2086. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

9. Addendum Item: The Board of City Commissioners considered the request for approval from the Administration Department to receive an update on the Mayor's Economic Development Advisory Group (MEDAG).

Keith Hunke, City Administrator, appeared before the Board. President Seminary has engaged a group of community leaders who represent MEDAG 2016 and have been diligently collaborating and planning the Mayor's Livability Summit. The purpose of the summit is to gather input and information to improve the long-term environment of our community – one that drives economic growth, quality of life, community leadership and diversity, to make Bismarck a global community of choice. The Mayor's Livability

Summit is scheduled for March 9, 2017, from 9:00 a.m. to 2:30 p.m. at the Bismarck State College National Energy Center of Excellence (NECE) Bavendick Stateroom.

There was discussion between Mr. Hunke and the Board relating to costs (room reservation, technology, etc), food and beverages, funding, tickets.

Commissioner Oban made a motion to pay for items, not including food or beverages, for the Livability Summit with a cap of \$3,000. Commissioner Askvig seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Guy, Oban, and President Seminary. Nays: Commissioner Marquardt, the motion carried.

The Board revisited the Legislative Report at the request of Keith Hunke, City Administrator.

HB 1010 and HB 1070 - Support

Commissioner Askvig made a motion to approve the request to support HB 1010 and HB 1070. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

5. The President of the Board of City Commissioners announced the hour had arrived for the PUBLIC HEARING on Ordinance 6242 relating to classes of retail liquor licenses - Class L.

ORDINANCE NO. 6242

AN ORDINANCE TO AMEND AND RE-ENACT SECTION 5-01-04 OF THE BISMARCK CODE OF ORDINANCES (REV.) RELATING TO CLASSES OF RETAIL LICENSES.

BE IT ORDAINED BY THE BOARD OF CITY COMMISSIONERS OF THE CITY OF BISMARCK, NORTH DAKOTA:

No member of the public spoke at the public hearing.

Commissioner Askvig made a motion to adopt Ordinance 6242. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

6. The Board of City Commissioners considered the request for approval from the Engineering Department for the following items relating to the South Bismarck Watershed:

- Receive South Bismarck Watershed Model Update and Stormwater Improvement Report and presentation from Apex Engineering Group.

Scott Schneider, Apex Engineering, appeared before the Board to make the presentation. There was discussion between Mr. Schneider and the Board relating to existing ditches, piggyback projects for efficiency, benefits of projects on other areas, and solutions if we are heading into a wet cycle.

The Board received the report from Mr. Schneider but took no formal action. A copy of Mr. Schneider's presentation will be attached at the end of the minutes.

- Consider alternatives from Apex Engineering Group and recommendations from the City Engineer regarding the South Bismarck Watershed.

Gabe Schell, City Engineer, appeared before the Board and presented the recommendations for the improvements. There was discussion between Mr. Schell and the Board.

Commissioner Askvig made a motion to have staff bring back an overall assessment including impacts on commercial versus residential properties at the next meeting. Commissioner Marquardt seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

7. The Board of City Commissioners considered the request for approval from the Public Works Utility Operations Department to receive and consider disposition of bids for 2017 Chemical Bid for Pebbled Quicklime for Water/Wastewater Treatment.

Michelle Klose, Public Works Utilities Operations Director, appeared before the Board. The bids for the pebbled quick lime was not awarded at the December 13, 2016 City Commission meeting to allow for additional time for consideration by staff.

BIDDER	BID AMOUNT
Graymont	\$160.00
Pete Lien	* Did not meet required specs
Univar	\$432.97

Ms. Klose recommended awarding the bid to Graymont, LLC for pebbled quick lime chemicals for the 2017 calendar year.

Commissioner Askvig made a motion to award the bid to Graymont. Commissioner Guy seconded the motion. Upon roll call, the commissioners voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

Commissioner Askvig made a motion to accept the South Bismarck Watershed Model Update and Stormwater Improvement Report from Apex Engineering (first bullet under item #6). Commissioner Oban seconded the motion. Upon roll call, the commissioners

voted as follows: Ayes: Commissioners Askvig, Marquardt, Guy, Oban, and President Seminary. Nays: None, the motion carried.

10. The Board of City Commissioners considered other business.

The Board had no other business to discuss.

Having completed the items on the agenda, President Seminary asked if there was any further business for this meeting. There being none, the meeting was declared adjourned at 6:47 p.m.



South Bismarck Watershed Storm Sewer Improvements

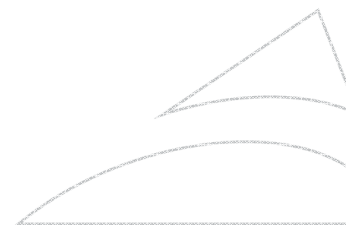
Bismarck City Commission

January 10, 2017



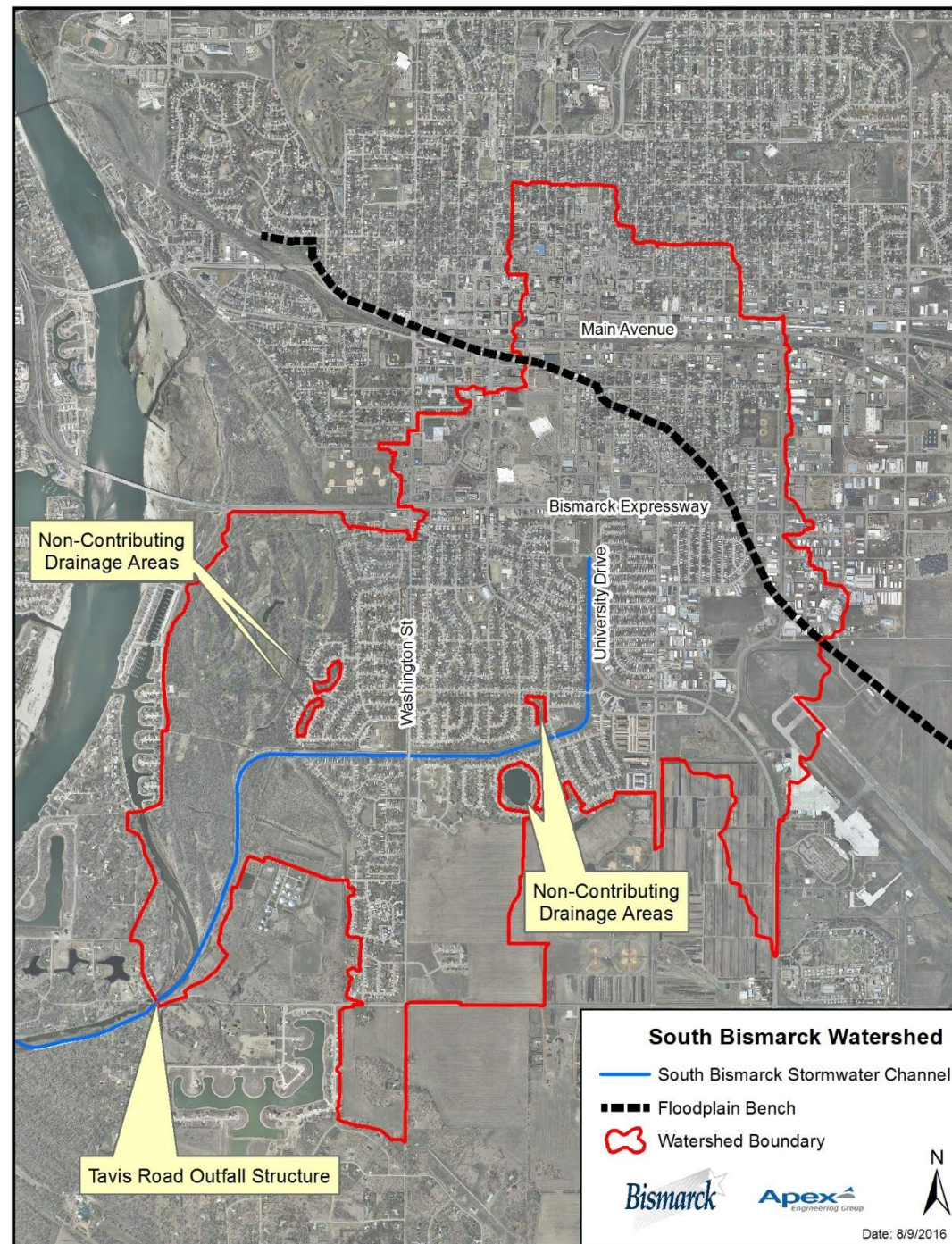
Presentation Overview

- Recap of Project
- Public Information Meeting
 - New Alternative Studied
- Recap of Project Alternatives:
 - 12th Street Alternatives
 - Kiwanis Park Bypass
 - South Bismarck Bypass



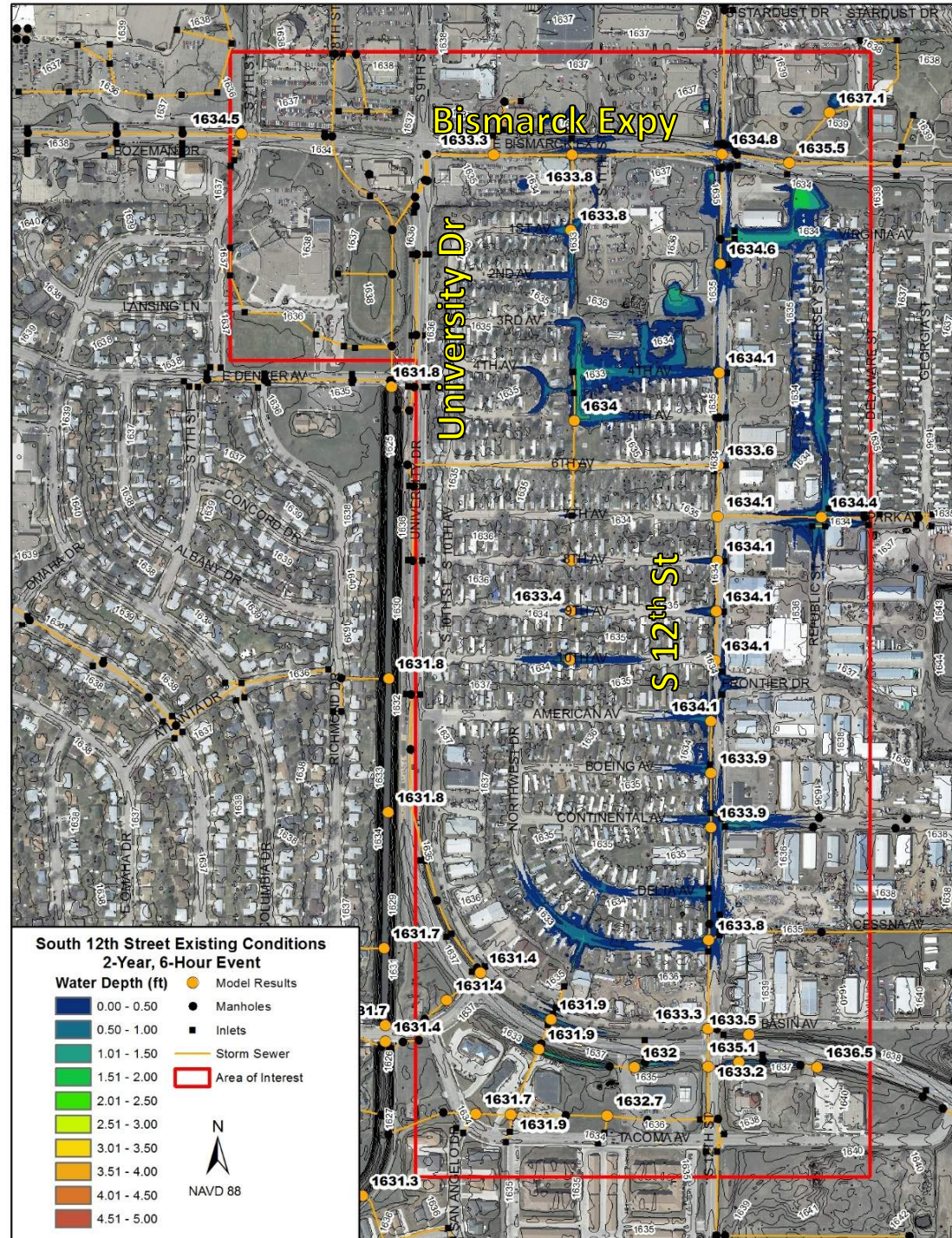
Watershed Overview

- 3,570 Acres
- Fully Developed
- Stormwater Ditch
- Outlet through Tavis Road
- Floodplain Bench



South 12th St / Bismarck Expressway

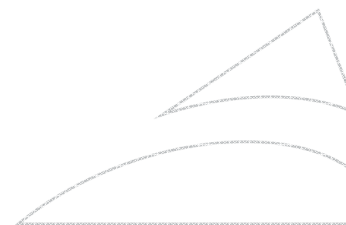
- Base Model
Inundation Mapping
- 2-Year Event





Public Information Meeting

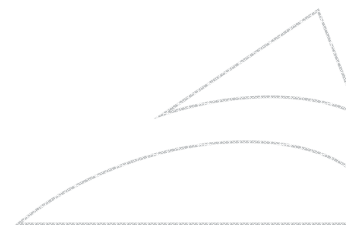
- City Commission: August 23, 2016
- Public Meeting: August 25, 2016
- Focus Areas





Comments Received

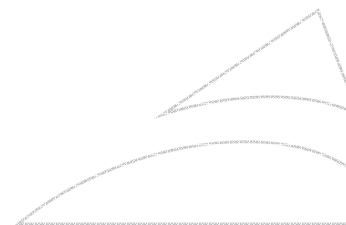
- Culverting system on ditch system appears to be too small.
- Ditch should be concrete lined.
- Is there a pump station option?
- The ditch seems to have a lot of sediment deposited.
- What is the cost for each property owner?
- Widening and expanding ditch will improve everything.
- Can the ditch slope be improved?





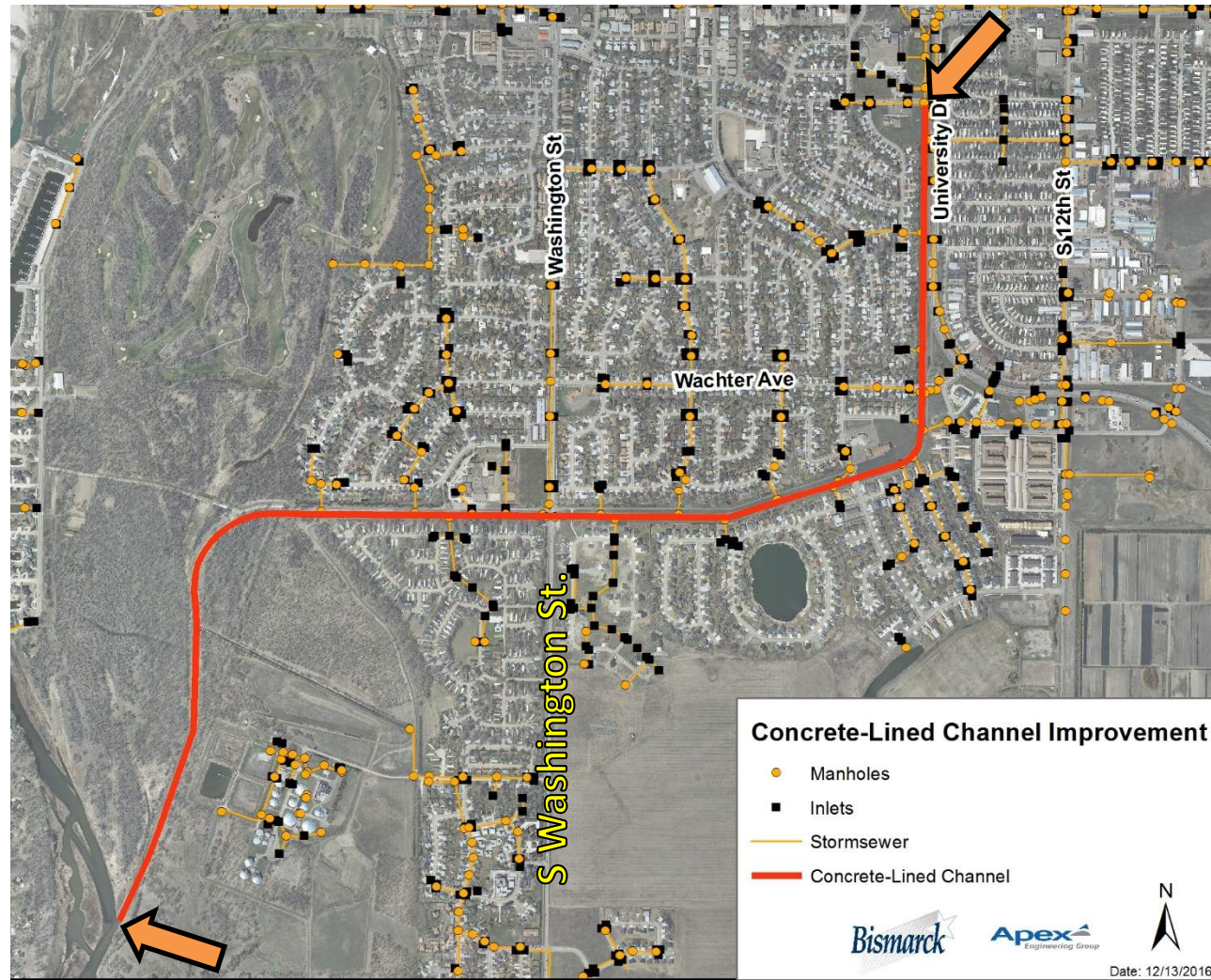
Public Information Meeting

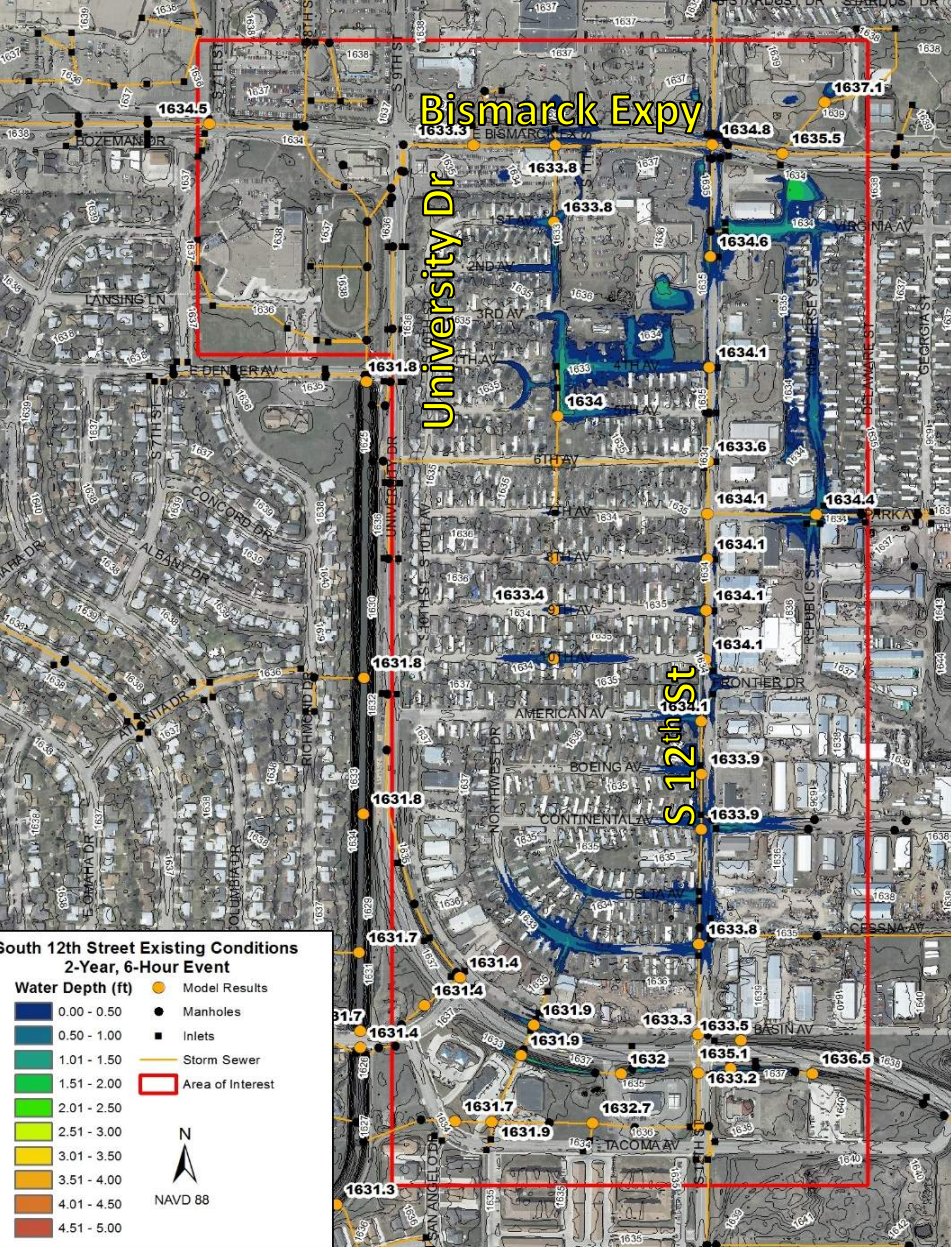
- City Commission: August 23, 2016
- Public Meeting: August 25, 2016
- Focus Areas
- New Alternative - Concrete Lined Ditch



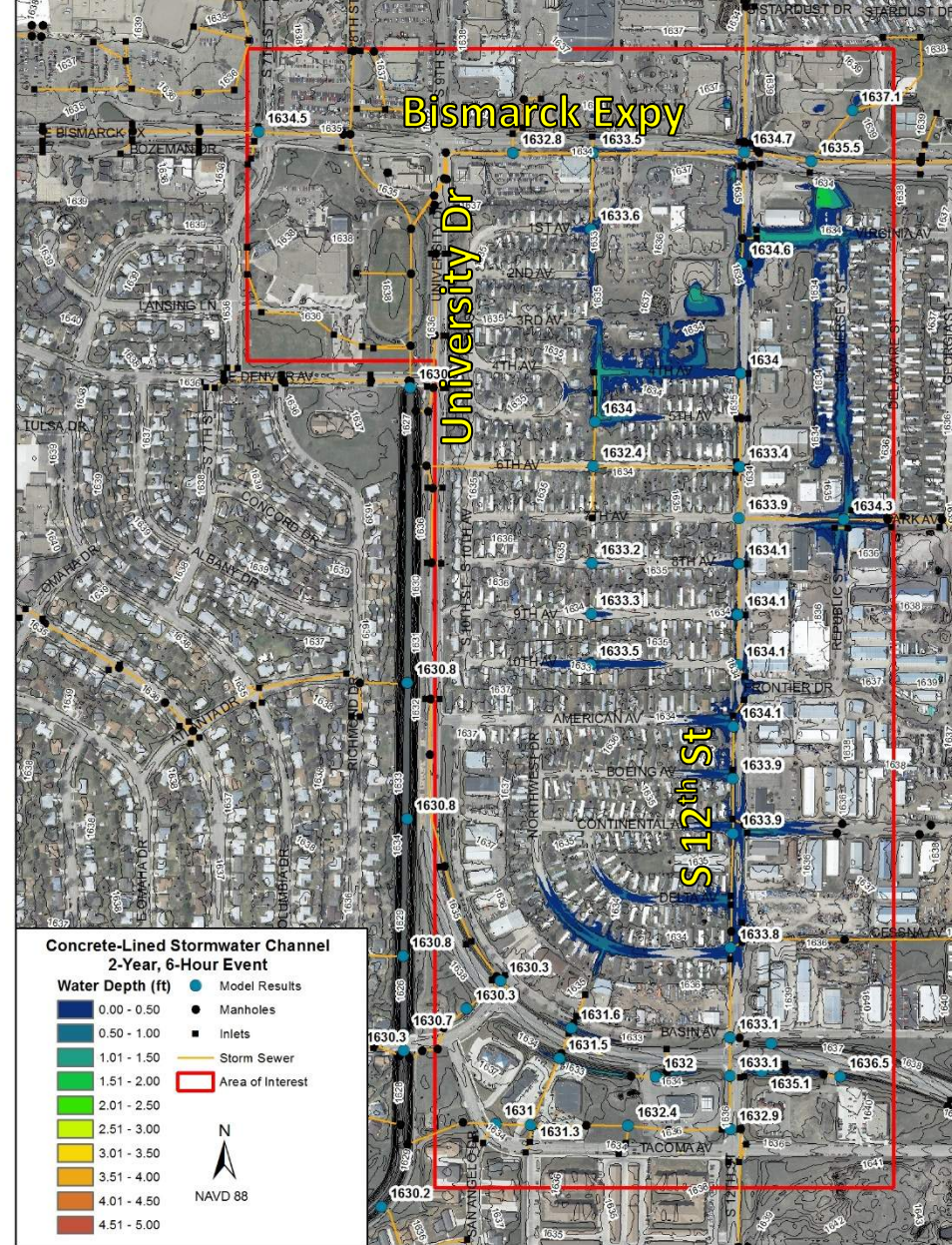
Concrete Ditch Alternative

- 35-ft Bottom Width
- 6-ft Side-slopes
- \$16.4 Million

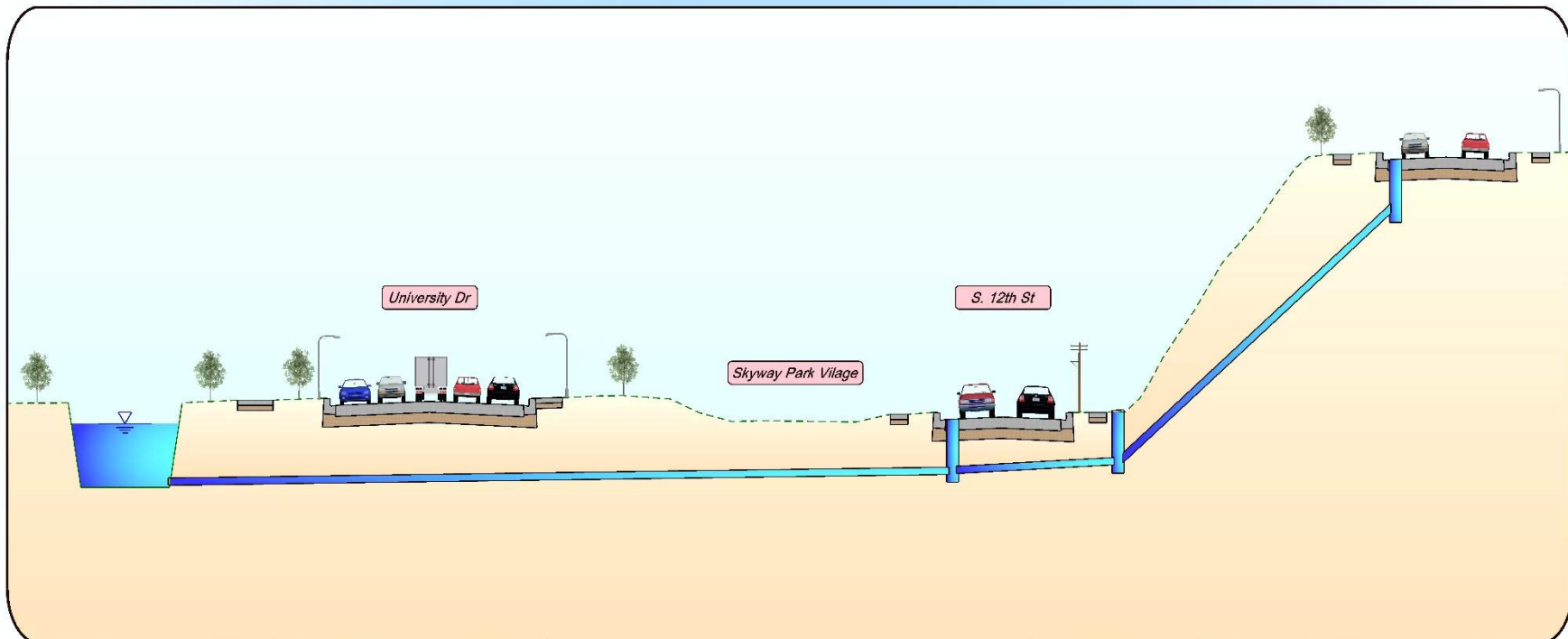




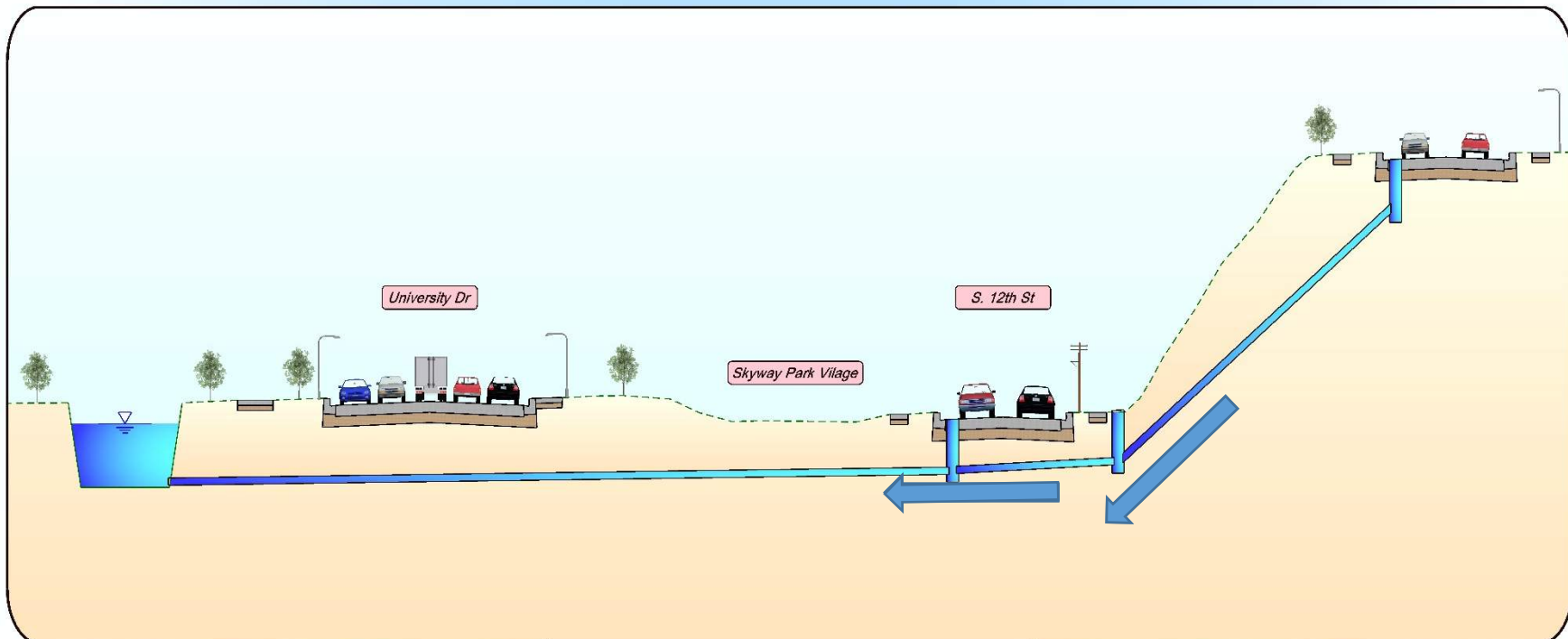
Existing Conditions



Proposed Conditions



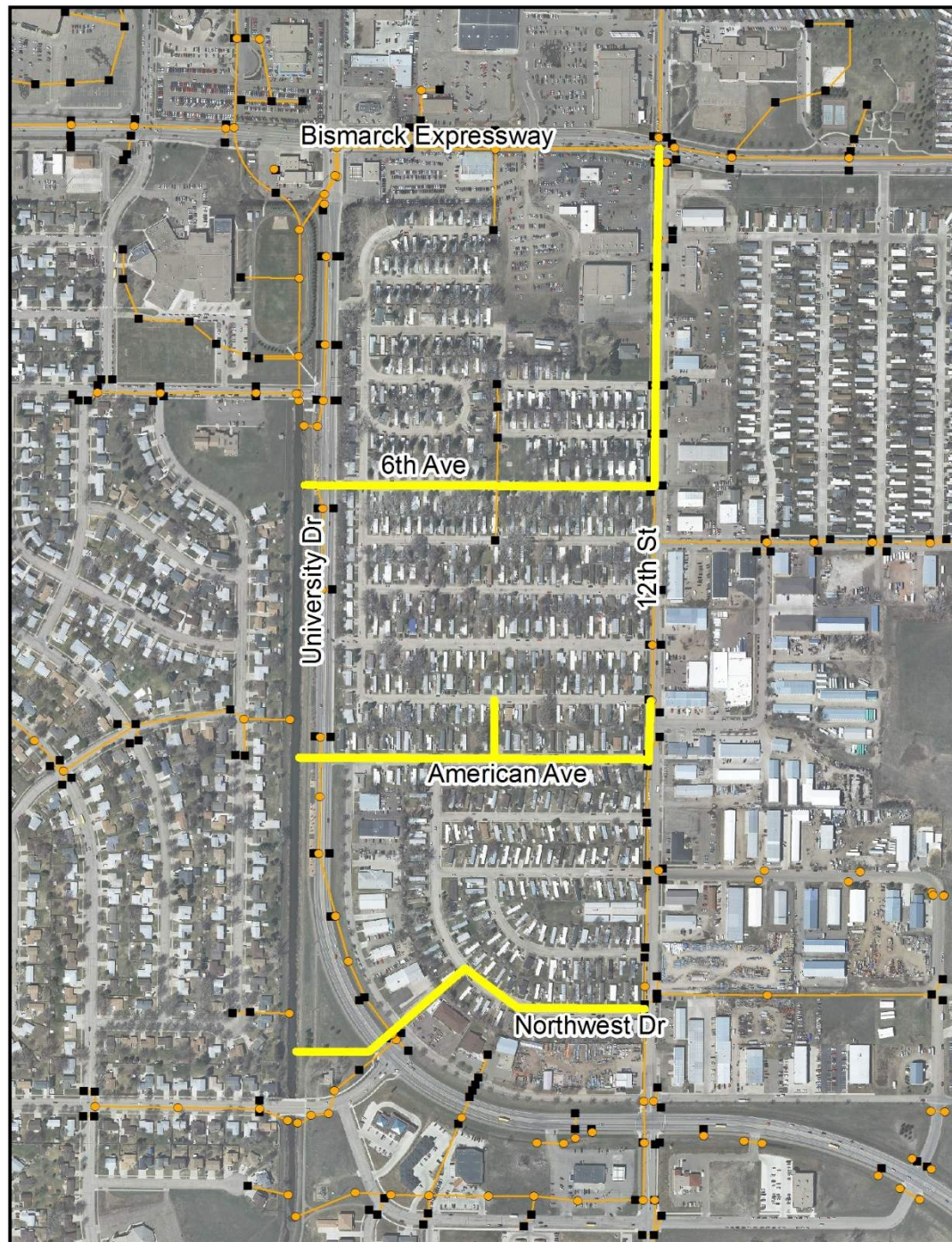
Existing Drainage Ditch
University Drive / S. 12th Street



Existing Drainage Ditch
University Drive / S. 12th Street

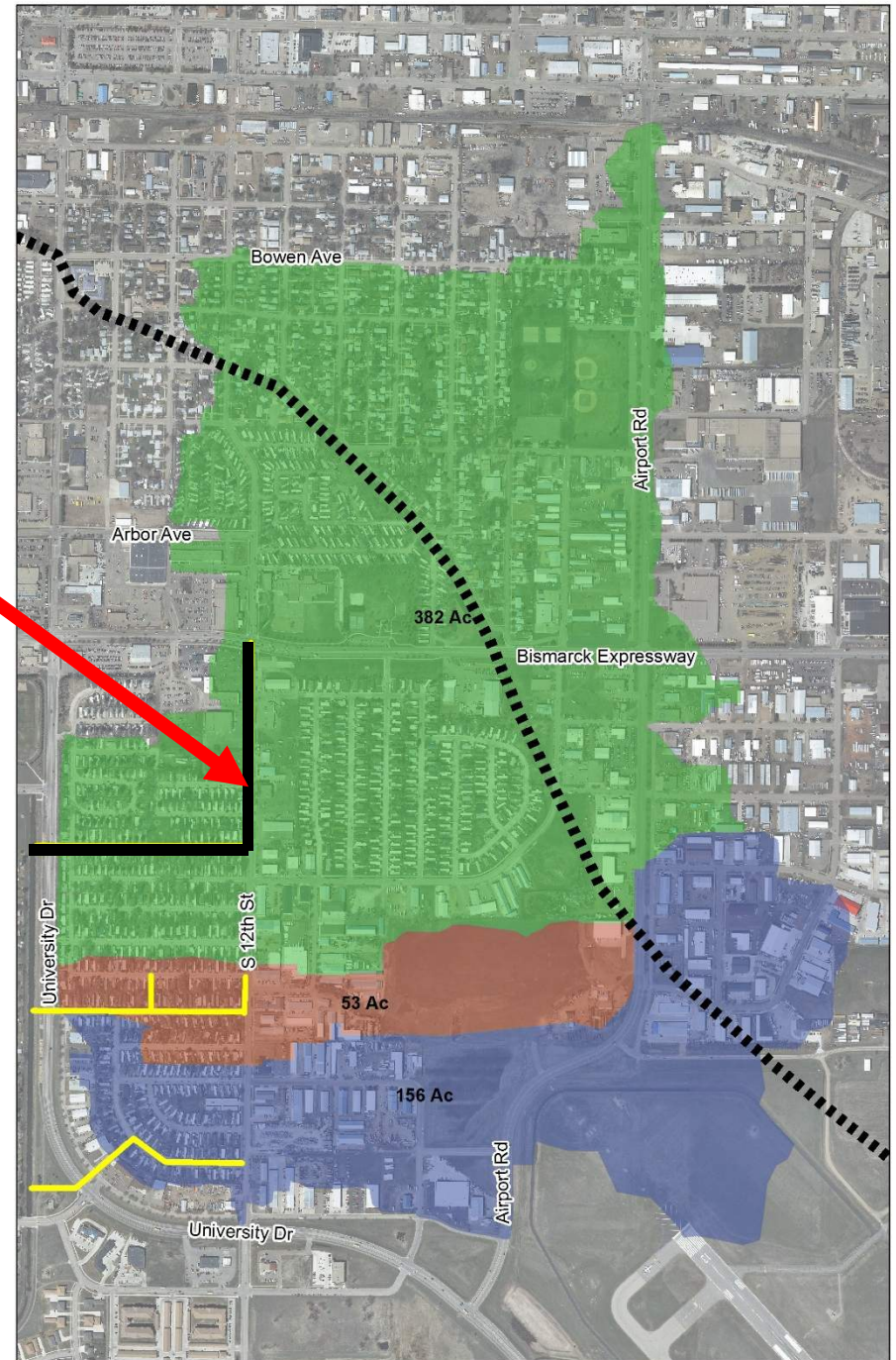
Proposed South 12th Street Improvements

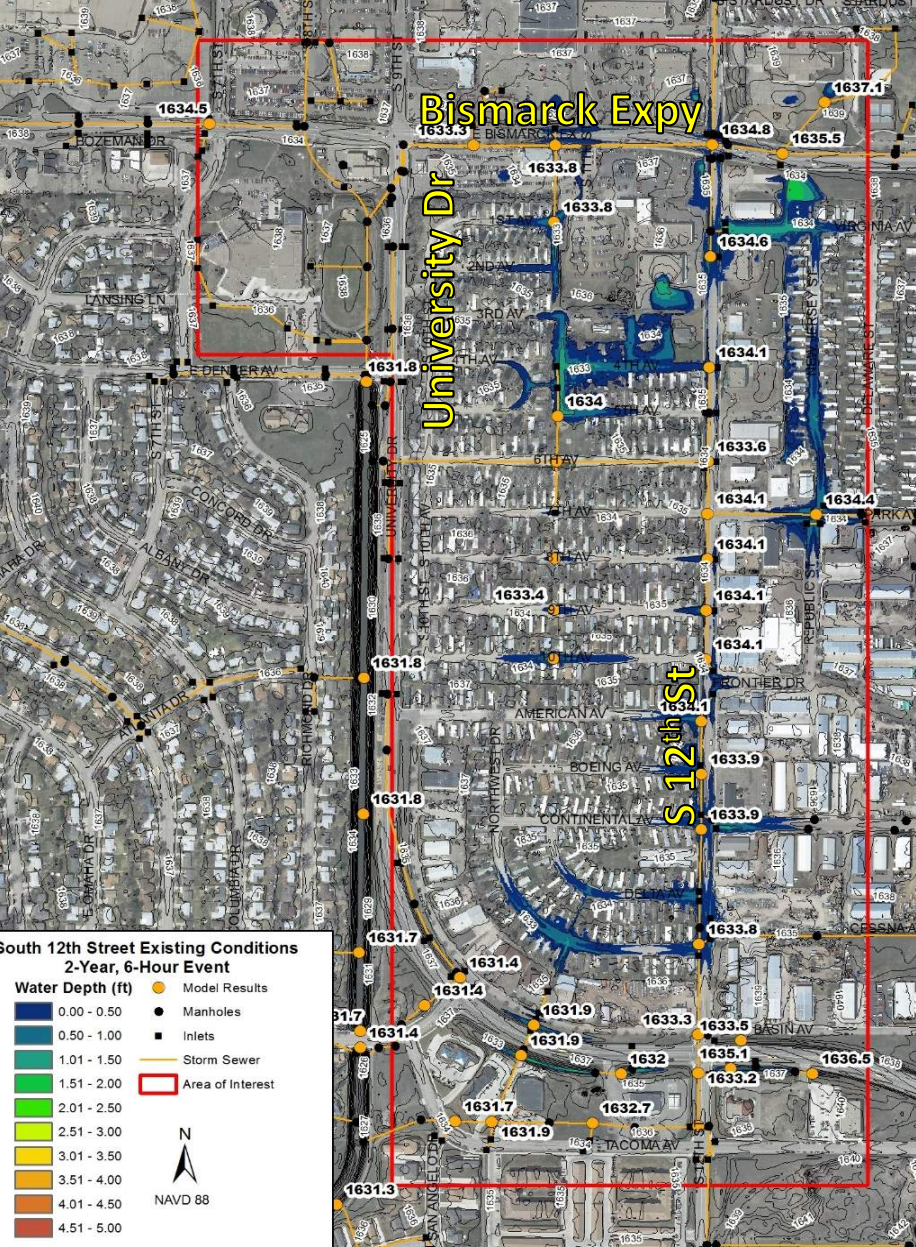
- 6th Avenue
 - \$4.2 Million
- American Avenue
 - \$2.1 Million
- Northwest Drive
 - \$2.0 Million



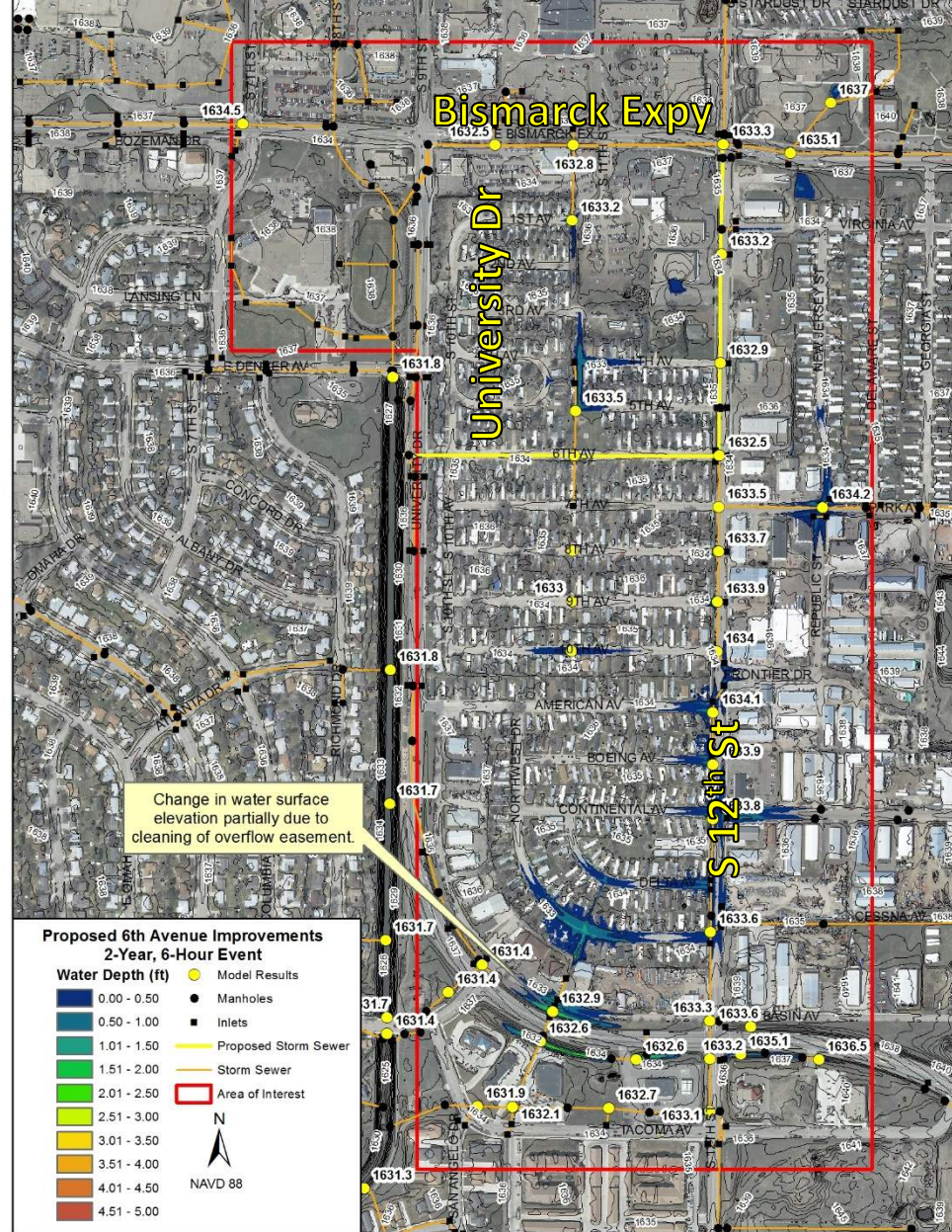
Proposed South 12th Street Improvements

- 6th Avenue Project – North Segment





Existing Conditions



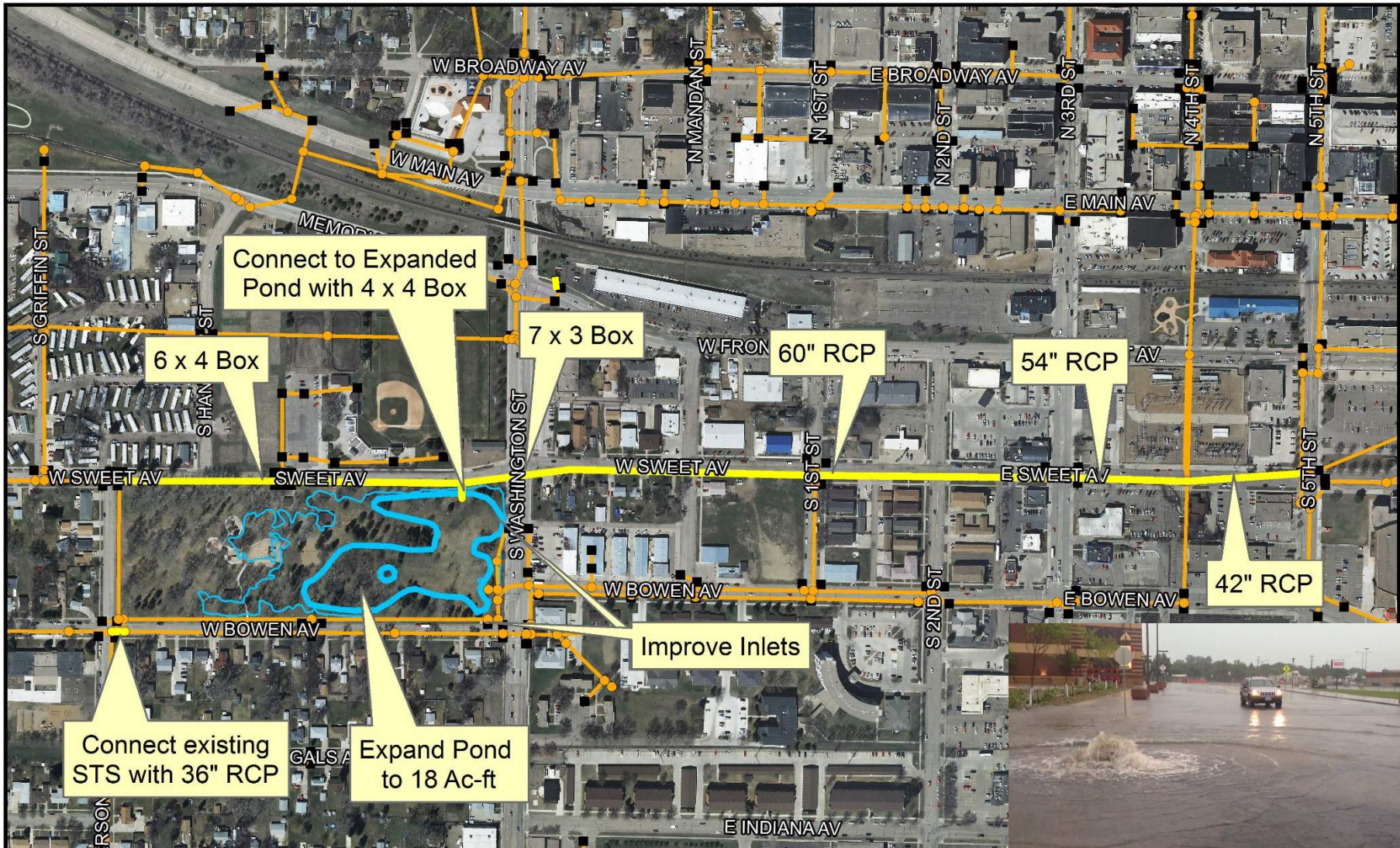
Proposed Conditions

Other Problem Areas



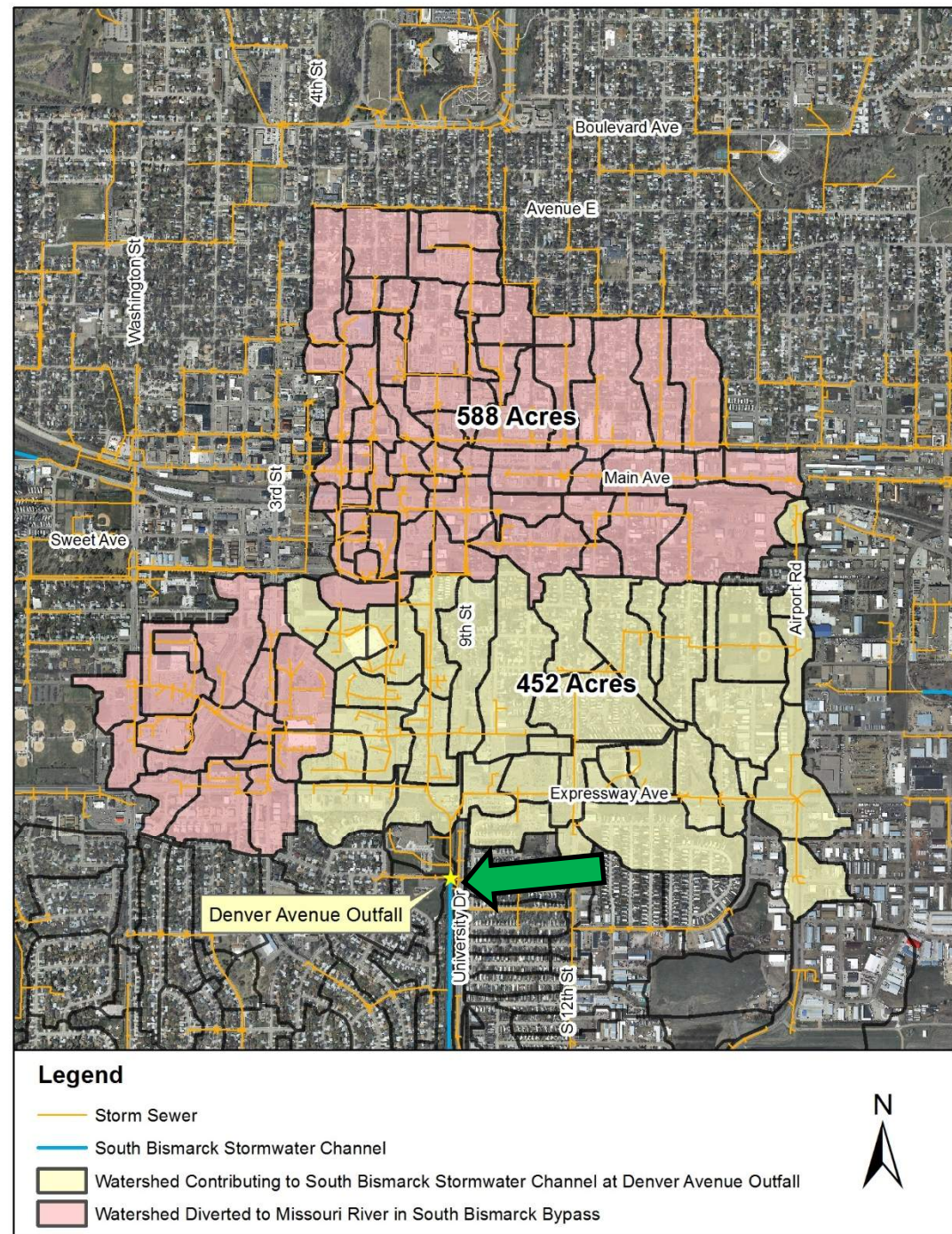
Kiwanis Park Bypass

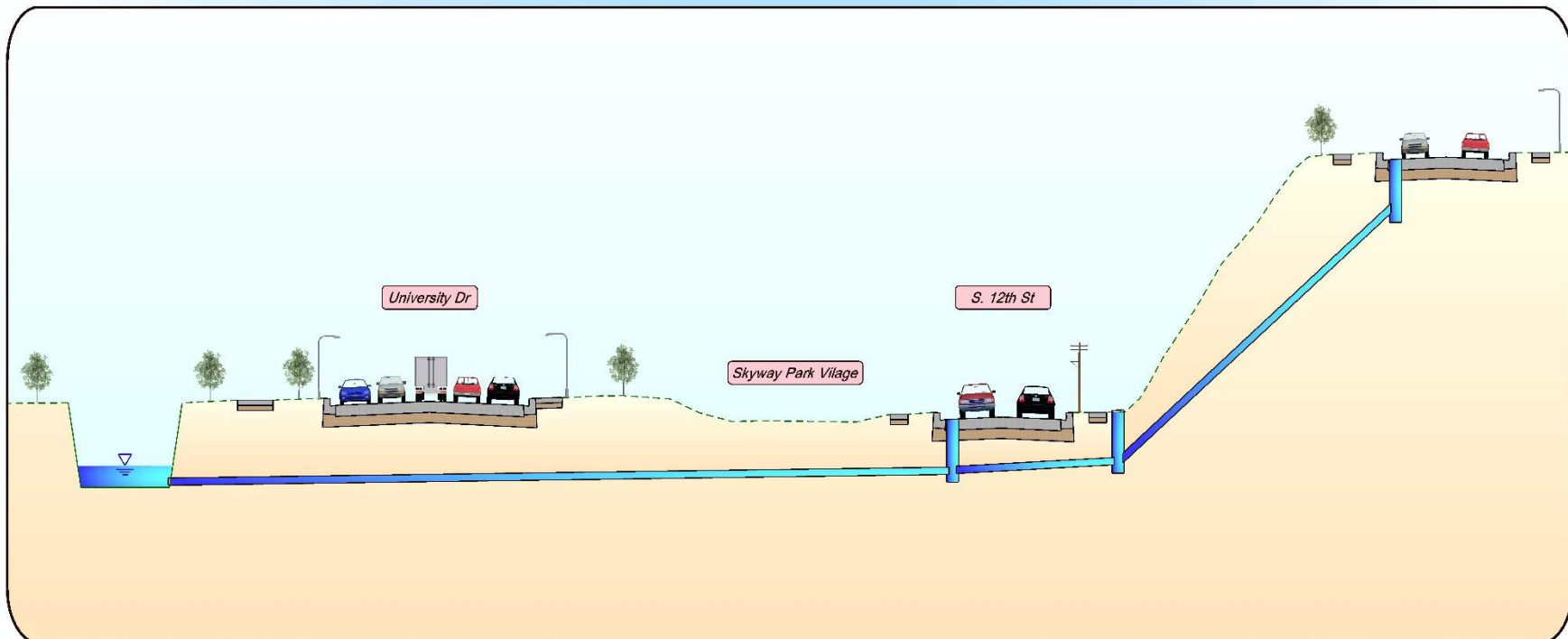
- Limited to 5th Street/Bowen Ave
- Utilizes Existing Outlet
- \$4.3 Million



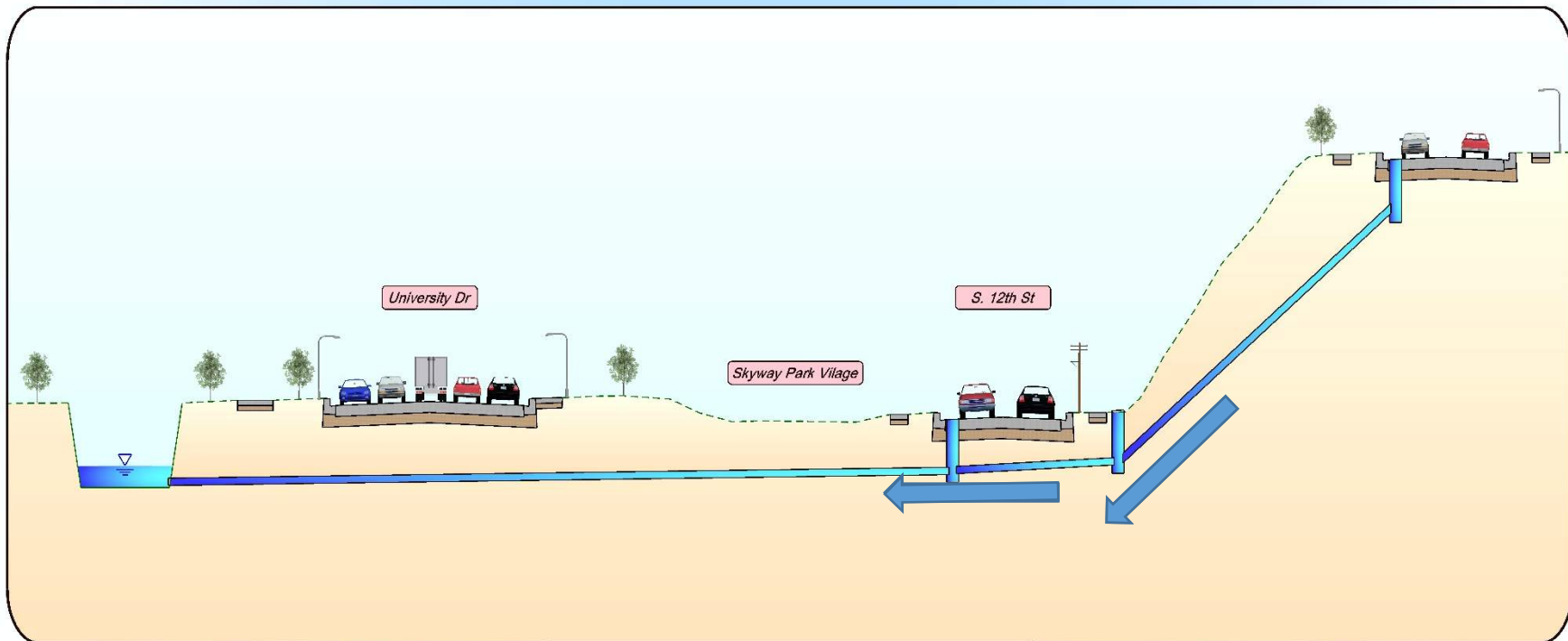
New Outfall to Missouri River

- Divert 56% of Watershed Area





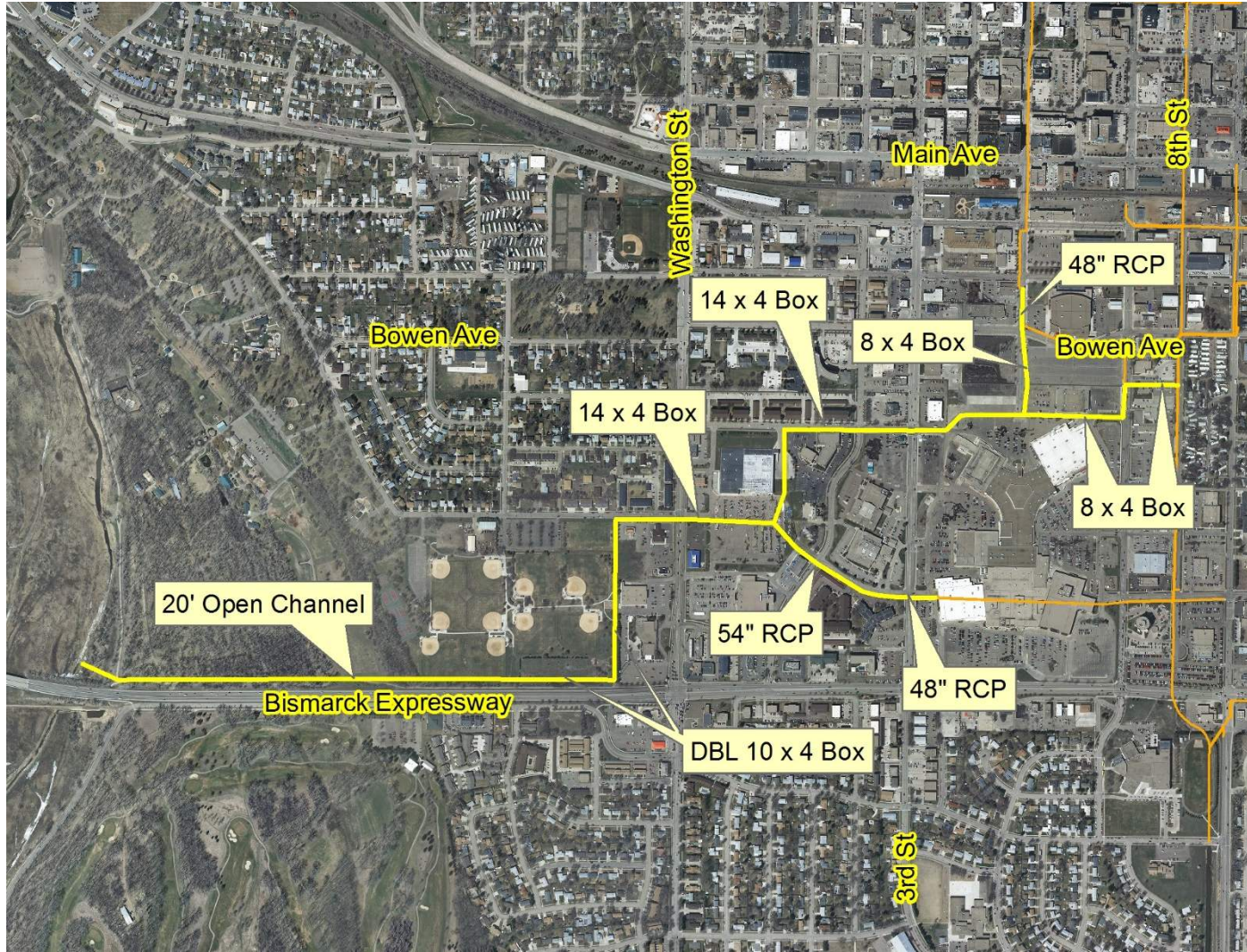
Existing Drainage Ditch
University Drive / S. 12th Street



Existing Drainage Ditch
University Drive / S. 12th Street

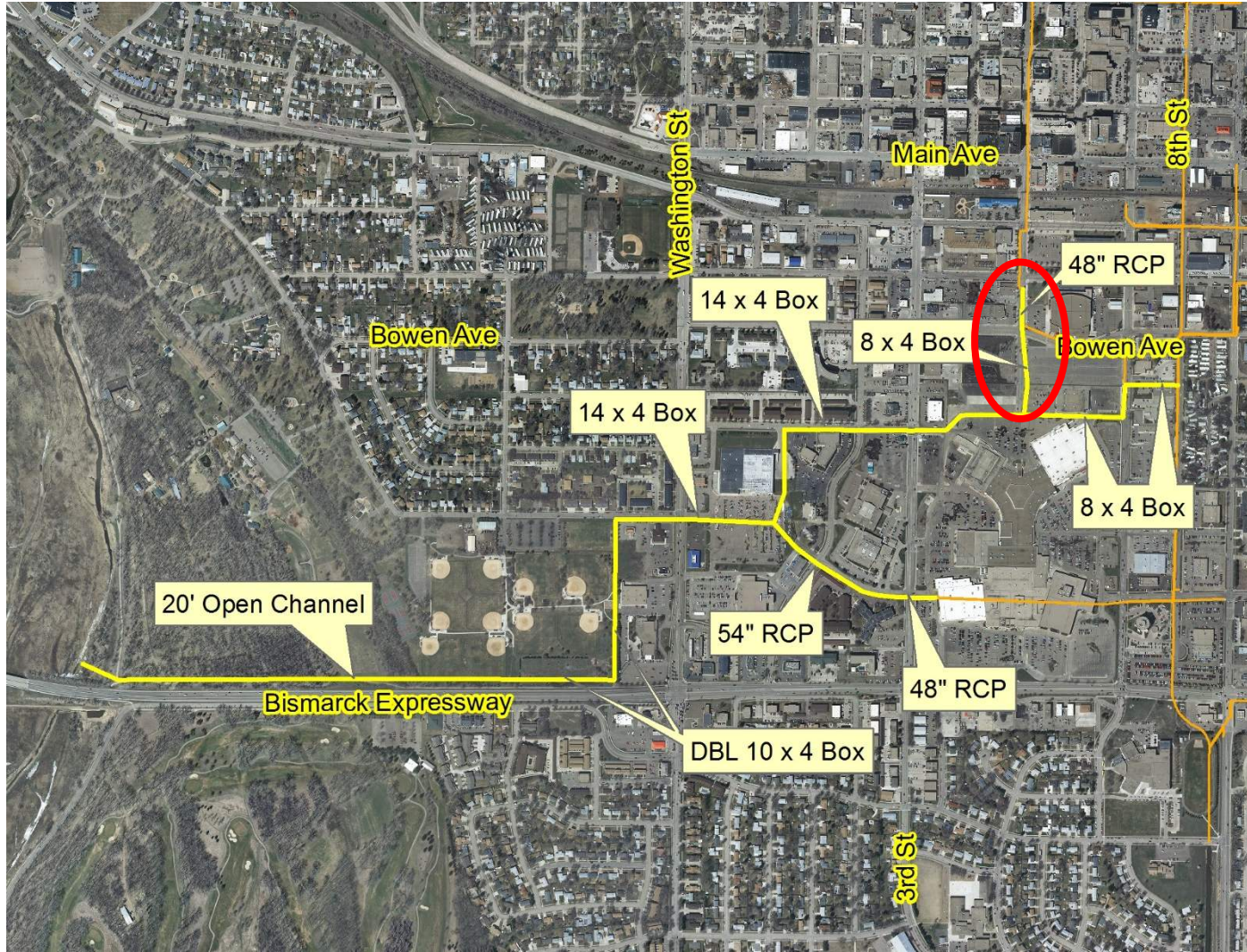
South Bismarck Bypass

- Low Profile Box Culverts
- \$19.3 Million
- Open Channel



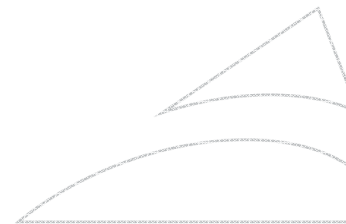
South Bismarck Bypass

- Low Profile Box Culverts
- Open Channel
- \$19.3 Million



Opinion of Probable Costs

Improvement	Estimated Cost
6th Ave Improvements	\$4,200,000
American Ave Improvements	\$2,100,000
Northwest Dr Improvements	\$2,000,000
Kiwanis Park Alternative	\$4,300,000
South Bismarck Bypass	\$19,300,000





South Bismarck Watershed Storm Sewer Improvements

Bismarck City Commission

January 10, 2017

